

Hospital Moves Into Air Conditioned Bldg.

NEW ORLEANS—The new 250-bed air conditioned Ochsner Foundation hospital, built at a cost of \$5,500,000, began operation June 12 after moving 134 patients from its old wood-frame quarters to its five-story structure at 2116 Jefferson Highway.

The structure has an expansion potential of up to five more floors, according to Dr. L. L. Weismiller, hospital director.

A fleet of eight ambulances and many private automobiles transferred the patients in what hospital officials called "Operation Splinters to Splendor."

Judges Try Out Air Conditioning

OKLAHOMA CITY—First air conditioners for the courthouse—two 1½-ton console units,—have been delivered.

District Judge A. P. Van Meter, whose office is in the northeast corner of the fifth floor, and Glen O. Morris, located in the southwest corner of the same floor, got the first two air conditioning units for a "trial" run.

The new units, which cost \$600 each, will cool the judges' chambers and the office of the bailiffs. No air conditioning of the courtrooms or other judicial offices is planned for the immediate future, but will likely follow, informed sources stated.

Westinghouse Appoints Angier Heat Pump Head

HYDE PARK, Mass.—Milton S. Angier has been appointed product manager of heat pumps for the Air Conditioning Div. of the Westinghouse Electric Corp., it was announced recently by Harry E. Seim, vice president.

Angier joined Westinghouse in 1924 following his graduation from the University of Illinois. During his 25 years with the company, he has served in various sales and managerial positions. Prior to his present appointment, he was manager of the electric utility section of the Westinghouse offices in New York City.

FTC Attacks Unequal Ad Allowances by Mfrs.

WASHINGTON, D. C.—Asserting that cooperative advertising allowance must be offered to all competing purchasers on "proportionately equal terms," the Federal Trade Commission has recently filed a complaint against the Wooster Rubber Co., a housewares manufacturer, for violating the Robinson-Patman Act in not doing so.

The FTC action attacked a common trade practice in the housewares industry where manufacturers pay all or parts of the expense of cooperative advertising and demonstrators for some large department stores. How much aid from the manufacturer the store receives depends on the amount of traffic and sales the demonstrator and advertising generates. Smaller stores have been required to pay the entire cost of demonstrators and advertising themselves.

This is the first case in which the FTC has applied this doctrine to the housewares field. It has applied it in the past to cosmetics and toilet preparations.

Servel Skipped Mart Exhibit Because of Biggest Selling Season

EVANSVILLE, Ind.—Because Servel, Inc. is in the midst of its busiest selling season, the company had to forego its usual product exhibit at the summer market of the American Furniture Mart in Chicago.

In answer to a question from reporters, W. Paul Jones, Servel president, said:

"This period is the height of the air conditioning and refrigeration selling season. Every man in the Servel selling organization is out in the field helping Servel distributors and dealers to take full advantage of the current upsurge in sales. Rather than pull in any field sales representatives to man the Servel exhibit in Chicago, we simply decided not to open the exhibit for the summer market."

Servel will have a complete display of its 1955 air conditioning and refrigeration products at the winter market in Chicago next January, Jones said.

New California Firm Will Distribute Rheem Mfg. Products

BEVERLY HILLS, Calif.—An announcement was made recently of the formation of Southwest Air Conditioning Supply Co., with headquarters here, and its appointment as a California distributor for Rheem Mfg. Co.'s heating and air conditioning line and built-in appliances.

The new corporation was formed by Albert J. Wilde, Jr., owner of Air-Conditioning Supply Co., Phoenix, Ariz., and Don Piper, former executive vice president of Norman Products Co.

Wilde, who has been in the distributing business since 1946, is president of the firm. He will continue his interest in the Phoenix company, which also is a Rheem distributor.

Piper has had 30 years' experience in engineering, manufacturing, and sales capacities in the air conditioning and heating fields. He was one of the organizers of Norman Products and was associated with Surface Combustion Corp. for 18 years.

George P. Mandel, former regional sales manager of Norman Products, will join the new firm as sales manager.

The company will operate warehouses throughout California, including Fresno, Stockton, and Oakland.

Polk Bros. Clerks Strike For Higher Base Pay

CHICAGO—Some 140 salesmen and clerks at Polk Bros. seven appliance and furniture stores and warehouse here walked off their jobs on July 1 when their union contract expired and negotiations were deadlocked.

The salesmen are seeking a \$5 to \$10 increase in base pay, an adjustment of salary on a seniority basis, and paid vacations based on average weekly earnings rather than on base pay.

The company has refused to grant these demands and has filed suit for an injunction against the strike and for \$1,000,000 damages against the Retail Clerks International Association and Local 1515A, Department Store Sales Employees Union.

At press time, the strike was still on. Supervisory employees were keeping the stores open.

It was reported that the present starting salary is \$50 a week, which the union wants increased to \$60. Salesmen also get a 1% commission on appliance sales and 2% on floor coverings and furniture. No increase is asked in the commission rate.

A spokesman for management claims that experienced salesmen make between \$7,500 and \$12,000 annually. A union spokesman, however, said they were making between \$5,000 and \$6,000.

Distributor's Gifts Would Keep Party Heads Cool Anywhere, Anytime

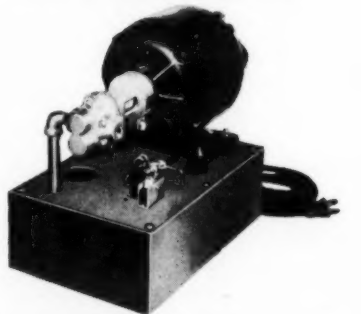
CHICO, Calif.—Chico Air Cooler Distributors here has shipped two of its evaporative coolers to President Eisenhower and to Adlai E. Stevenson, head of the Democratic party, with this letter:

"These are trying times. From recent news events, we at Chico have felt a growing awareness of bigger and more frequent heated arguments among Americans.

"Today, more than ever before, we believe that the best formula for solving the many problems confronting our great country is: Cool-headedness.

"So please accept with our compliments this portable air cooler from Chico. You can carry it with you and use it anywhere, anytime, as a reminder for all Americans to keep calm—and keep cool."

eliminate pump-to-drain disposal line with



NEW high-pressure Condensate DISPOSAL UNIT (MODEL CCC)

- ½ H.P. MOTOR — pumps against 100 lbs. pressure
- AUTOMATIC OPERATION mercury float switch
- HOT-DIPPED GALVANIZED TANK

No need to run separate disposal line. Water is pumped directly into the condenser water line, through check valve furnished.

\$7450 { to contractors — or order through (F.O.B. Dallas) your jobber

for full information — write or call

PASHCRAFT CO.
MECHANICAL EQUIPMENT
5643 Dyer Street • Dallas, Texas

RANCO DUAL PRESSURE CONTROL

... safety-guarantee for your air conditioning service

Your customers will appreciate the protection of this Dual Pressure Control ... and here's why:

High pressure cut-out with non-adjustable high pressure limit stop safeguards the system—prevents service adjustment above the maximum safe operating pressure. Low pressure safety cut-out prevents pulling air into the system with excessive low pressure operation.

In either event, the system shuts down until restarted with the manual reset. Both high and low pressure ranges are independently adjustable.

Add up those features and you'll understand why Underwriters Laboratories requires this type of control on all hermetically sealed air conditioning systems ... why both you and your customers will consider it well worth the few minutes it takes to install. Make your next job a Ranco Dual Pressure Control installation ... now available in Types 012-1593, 012-1594 and 012-1595 ... a safety-guarantee for your air conditioning customers.

Ranco Inc.

COLUMBUS 1, OHIO



WORLD'S LARGEST MANUFACTURER OF REFRIGERATION CONTROLS

TAKE A LOOK AT

PENNORAMA



WHY Penn GETS THE PEN

Because Penn quality tubing is consistently drawn to close tolerances and exact specifications, you can talk it with pride—recommend it with confidence—write orders with the assurance of complete customer satisfaction.

The broad scope of Penn products enables jobbers and wholesalers to fill the bill accurately, quickly and profitably. Penn quality seamless copper tubing in 50' coils is packaged in sturdy, attractive cartons ready for re-shipment or delivery. All Penn packages are clearly marked for easy identification. Look to Penn for sealed tubing in straight lengths or coils up to 1" O.D.—Papco flaring and cutting tools for faster, neater tube work. For the entire picture of Penn products, write today for the story on PENNORAMA.

QUALITY TUBING HAS A "PENN NAME"



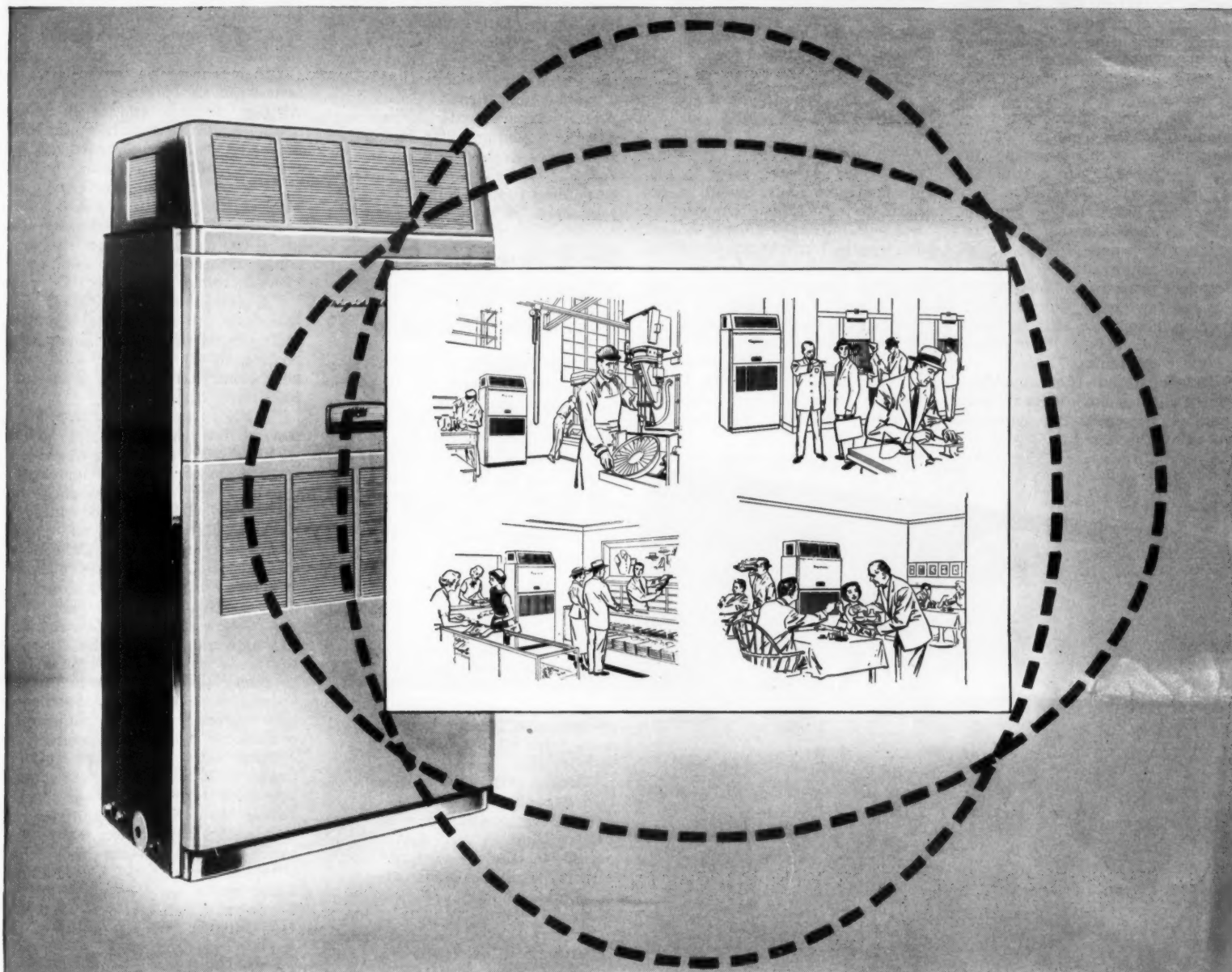
PENN BRASS & COPPER COMPANY

ERIE • PENNSYLVANIA • TELEPHONE 3-1164

FROM WHERE I SIT
IT'S EASY TO SEE WHY
PENN QUALITY PRODUCTS
GET THE NOD AND THE ORDER



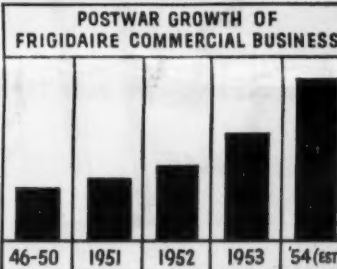
More Sales Opportunity for Frigidaire Dealers in Expanded Lines of Packaged Products



New Frigidaire Conditioners offer sales, advertising and service advantages

The rapid growth of sales of Master-matic Frigidaire Conditioners is typical of the good things that have been happening to Frigidaire Commercial and Air Conditioning Dealers coast to coast under Frigidaire's policy of emphasizing packaged products and compressors. Concentration of effort on packaged-unit selling benefits the dealer all down the line. Salesmen can concentrate on a single unified sales story and exclusive sales features. They're able to quote definite prices for complete installations to meet any prospect's exact needs. Dealers' advertising can sell tried and true product performance—backed by one responsible manufacturer. What's more, product selection is easy and accurate—installation and servicing are greatly simplified.

And these advantages apply not only to Master-matic Conditioners



but to every one of Frigidaire's packaged product lines. Proof that these advantages pay off is shown by the chart which illustrates the vast gains already made by all Frigidaire packaged product lines and points to a record-smashing future for Frigidaire Dealers coast to coast.

Dramatic illustrations like this are appearing in national magazine and trade paper ads coast to coast, to illustrate Frigidaire's exclusive Great Circle Cooling, and to help set the stage for 1954 Master-matic sales! They show at a glance how

Great Circle Cooling gets all the air up, out and around to fill the area with even comfort and without wasting cooling power! Remember, only Frigidaire Dealers can offer customers Great Circle Cooling!

BUILT FOR BEAUTY . . . BUILT FOR HEAVY DUTY

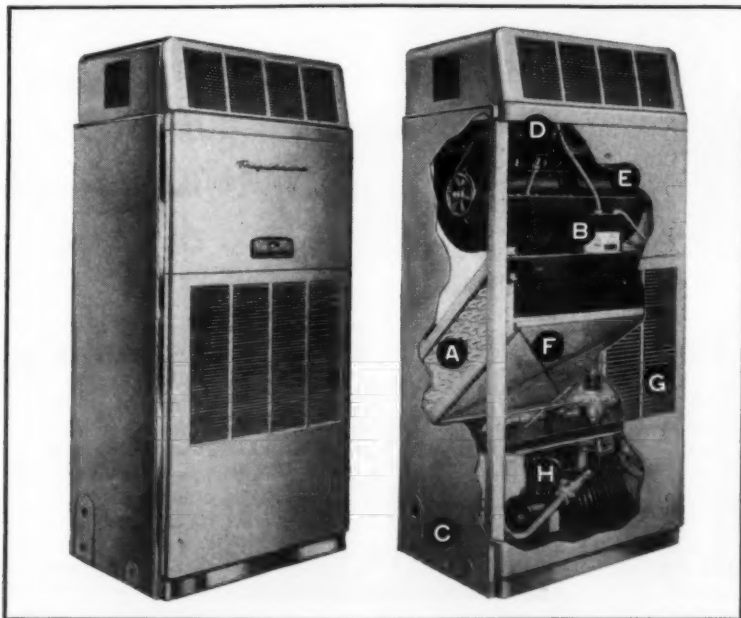
The 1954 Master-matic line has extra sales appeal in its new styling, new color, new trim. This beautiful exterior will help to make the sale in the many places where attractive appearance is desired. And for the "nuts and bolts" story, lifting off the

front panel will put the spotlight on scores of important sales points. The exclusive Multipath Cooling Unit (A), provides extra cooling surface that quickly and efficiently removes heat and humidity from the air.

Prospects can work the easy-to-

use concealed controls (B), and find out how simple and foolproof they are. Prospects appreciate the fact that Frigidaire units may be installed with little or no business interruption, thanks to the strategically placed connections (C), low and on one side. The fan motor (D), is rubber mounted and the cabinet is specially insulated (E), to deaden sound. Cleanable, aluminum mesh filter (F). Wide air inlet grille (G), permits free return of air. The heart of the system is the famous Frigidaire XD Meter-Miser direct drive compressor (H), sealed in steel, warranted for 5 years.

All these features and many more can be translated into dollars and cents savings for any prospect and he'll be sold on Frigidaire!



BIGGER PLANS THAN EVER BEFORE ARE TAKING SHAPE FOR FRIGIDAIRE COMMERCIAL AND AIR CONDITIONING PRODUCTS

Frigidaire engineering, manufacturing and sales operations are keyed for the greatest air conditioning era in all Frigidaire history. Product improvements, broader lines and new product development are all in high gear. All Frigidaire packaged product lines, in fact, are receiving this

treatment. And the deepening and strengthening of these lines give Frigidaire Commercial Dealers more opportunity to satisfy more prospects than ever before. It's the sales opportunity of a lifetime, and it proves, once again, the growing value of the Frigidaire Franchise.



FRIGIDAIRE

COMMERCIAL REFRIGERATION AND AIR CONDITIONING

— for growth and progress with General Motors

FOR
REFRIGERATION
AND
AIR CONDITIONING
EQUIPMENT...

SPECIFY

**READING
QUALITY
COPPER
TUBING**



**READING
TUBE CORPORATION**

EMPIRE STATE BUILDING
NEW YORK 1, N. Y.
WORKS: READING, PA.

New Mitchell Div.-- Home Cooling--

(Concluded from Page 1, Col. 2) ditioning setup, under the direction of E. A. Tracey, vice president.

After three years' research, Mitchell is readying the new commercial packaged air conditioner for introduction in September. Already in production, the unit will reach the market on a restricted basis.

The company went into production on window-type room air conditioners eight years ago.

"The postwar construction boom, which is still tremendous, offers a gigantic potential for the packaged air conditioner," Mitchell pointed out, noting the estimated \$34,000,000,000 construction figure for 1954, only 2% behind 1953's all time high.

"As the public has become accustomed to the comfort of air conditioning, it has become increasingly necessary to incorporate it in homes and offices alike. Virtually every construction plan includes air conditioning facilities, and that is where the packaged unit is all-important."

Mitchell prophesied that "within the next few years, no new construction blueprints will be complete without plans for comprehensive air conditioning."

Mitchell stated that manufacturing facilities have already been expanded to meet the demands created by the new line.

(Concluded from Page 1, Col. 3)

Nearly 32% said they would be willing to pay \$7.50 per month if necessary. Nearly 24% said they would go to \$10 a month. Slightly more than 11% would go higher, but 33% were undecided or gave no answer.

Some 78.5% said that if they were to buy a house without air conditioning, they would want the heating system designed so that they could add air conditioning.

Two-thirds said they would prefer a central cooling system, and 21.5% wanted room units. The others either didn't want any or were undecided. Eighty per cent said they would insist on a nationally known, reliable brand of air conditioning.

Inadequate Wiring--

(Concluded from Page 1, Col. 5)

25% of incompletes sales to private homes could be laid to inadequate wiring. Eighty per cent of lost sales in apartment houses were credited to the same source.

He explained that the utility's adequate wiring bureau had handled about 12,400 "problem" private dwellings and won acceptance for its recommendations in 3,800 cases. It also handled cases of 714 apartment houses with 38,800 dwelling units and got action in 58 cases affecting 2,940 dwelling units.

Judge Scowls at 90° Courtroom

CHARLESTON, S. C.—In its presentment for the June term of General Sessions Court, the Charleston County Grand Jury asserted that offices in the Charleston County Courthouse should be air conditioned.

Presiding Judge William H. Grimball agreed. A thermometer which the judge examined at 3 p. m. (June 11) from the bench in the courtroom registered 90° F. Judge Grimball's discomfort in his heavy silk robes might have increased had he known the official city temperature reading for that time was 81° F.

The News & Courier "played up" the grand jury's suggestion under a three-column head: "Grand Jury Again Recommends Courthouse Air Conditioning." The newspaper also ran a two-column picture of Judge Grimball, who scowled as he pointed to a thermometer which registered 90° F.

Dept. Store Sales for Week Ended June 26 3% Above Same Period of '53

WASHINGTON, D. C.—The Federal Reserve Board has reported that sales of U. S. department stores in the week ended June 26 were up 3% compared with the corresponding week of 1953.

The biggest advance, 19%, was registered by the Kansas City District. Sales rose in other districts as follows: Atlanta, 13%; St. Louis, 8%; Boston, 6%; New York, 5%; Minneapolis, 4%; Chicago and San Francisco, 1%.

Dallas District sales were unchanged from a year ago. Philadelphia, Cleveland, and Richmond districts reported declines of 5%, 4%, and 1%, respectively.

For the four weeks ended June 26 and also for the year to date, sales were off 3% from the year-ago levels.

Chicago Federal Reserve officials said department store sales in the two weeks ended June 26 were higher than in any similar June period in the Seventh District's history. Similar reports came from Milwaukee, Indianapolis, and other cities.

Market Has Cool Lounge

TAMPA, Fla.—An outstanding feature of the new B&B Supermarket at Henderson Blvd. and Dale Mabry Hwy. here is an air conditioned lounge with magazines and books for the youngsters to read while mother does the shopping.

Kelvinator--

(Concluded from Page 1, Col. 2) customer for \$10, contains six extension payment coupons. The first three may be used after six instalments have been paid and the others after 12 paid instalments.

Each coupon is good for a month's postponement of the instalment due with no questions asked. Credit standing is maintained and the equity in the appliance is safe, it is said.

After all instalments have been paid, the customer is allowed a \$2 refund for each unused coupon. Thus, a customer who used none of the coupons would receive \$12 back, or \$2 more than he paid for the bond.

Other feature of the promotion is the red and black plaid Therm-A-Bag, which retails for 99 cents, about one third what it would cost normally. The bargain-rate bag is intended only as a traffic builder and must be used properly to achieve its purpose, Coward said.

After the bag is purchased, it's up to the salesman to get the customer interested in an appliance, Coward said.

"A simple way to do this is for the dealer to run a local contest, built around the potential customer writing in 25 words or less, why she would like to own a specific Kelvinator appliance."

"A shelf item or major appliance can be offered as the top prize, with merchandise certificates as alternate prizes. A demonstration can be given of the appliance she says she'd like most to win."

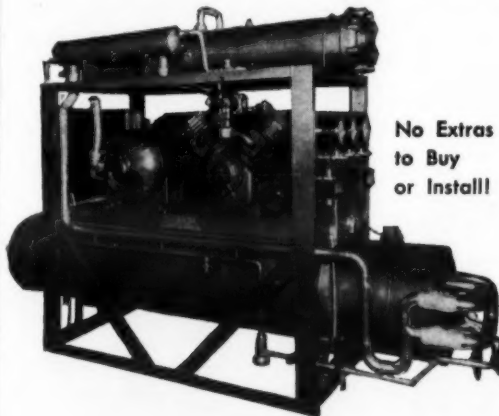
"The bag also offers an opportunity for the Lucky Cake Key promotion. This consists of distribution of Lucky Kelvinator 40th Anniversary Keys through the mail, followed by registration when the homemaker brings the key into the dealer's store. The key holder is then taken to a large Lucky Cake and an attempt made to unlock various sections containing certificates calling for prizes."

Other sales tools include an all-product Value Days newspaper broadside that emphasizes special values on all 40th anniversary Kelvinator appliances; suggested radio spot announcements; ad layouts for newspapers; TV commercials; and store trim set.

Ga. Firm's New Building To Be Air Conditioned

CORDELE, Ga.—A new, completely air conditioned building for Cordele Uniform Co. here was assured by the recent signing of a contract between the company and Jack B. Roobin, acting on behalf of the directors of the Crisp County Chamber of Commerce.

SCHNACKE Thermatrol WATER CHILLERS



No Extras
to Buy
or Install!

—completely
packaged
line . . .
10 through
60 tons!

Eliminate Costly Field Assembly!

All components in one low-cost single unit—motor, starter, full Freon charge, Thermatrol capacity regulator—everything! Designed for standard conditions: 35° or 40° suction, 55° water on, 45° water off. Simple hookup and balancing, 10-20-30-40-50-60-ton capacities standard. Ideal for multi-zone construction and year around systems. One order does the job! Write for engineering data.

1105 North
Governor St.

SCHNACKE, INC.

Evansville
Indiana

30

is old stuff in
refrigeration
thanks to

Detroit Double Duty Valves!

Here are three D's to keep in mind whenever you buy expansion valves—**Detroit Double Duty Valves!** Yes, Detroit expansion valves give you double-duty or dual purpose performance because they're designed for either high or low temperature applications. Take a look at the illustrated superheat curves of Detroit 777 and 673, expansion valves and note that both high and low temperature valves give the same excellent performance in the low temperature range. This can be a real time saver to you in an emergency. Specify **Detroit Double Duty Expansion Valves!**

NOTE: High temperature valve used for low temperature work may require that the suction line be throttled during pull-down.

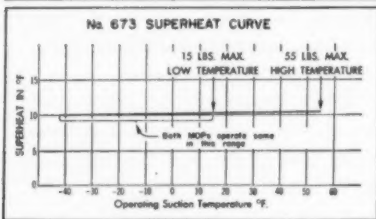
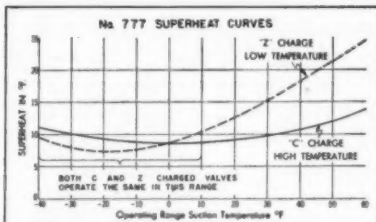
No. 777

- Capacities—1/8 to 2 tons Freon-12—Standard Valve; 1 to 3 tons Freon-12—External Equalizer.
- "C" and "Z" cross charges available.
- Accessible and easy superheat adjustment.
- Available with or without external equalizer.



No. 673

- Capacities—1.2 to 3.6 tons Freon-12.
- Adjustable superheat.
- Gas charged for motor overload protection and quick response.
- Duraflex bellows resist corrosion and insure long, trouble-free service.



DETROIT CONTROLS Corporation

8900 TRUMBULL • DETROIT 8, MICHIGAN

Division of AMERICAN RADIATOR & STANDARD SANITARY Corporation

Representatives in Principal Cities • Canadian Representatives in Montreal, Toronto, Winnipeg—Railway and Engineering Specialties, Ltd.



AUTOMATIC CONTROLS for REFRIGERATION

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Serving home and industry

AMERICAN STANDARD • AMERICAN BLOWER • CHURCH SEATS & WALL-TILE • DETROIT CONTROLS • KEWEE BOILERS • ROSS EXCHANGERS • SUNBEAM AIR CONDITIONERS

SPECIALTY SELLING METHODS

Offer of Free Frozen Food Saw Fetches Customers Into Norge Dealers Showrooms

CHICAGO—Frozen food saws are proving to be one of the sharpest traffic-building promotions of the year for Norge appliance dealers, according to John D. Schuman, advertising manager of Norge Div., Borg-Warner Corp.

Schuman reported recently that dealers have ordered 400,000 saws as customer giveaways in the last two months. Thousands more are back-ordered, he added.

The saws are used primarily to promote sales of Norge "Customatic" refrigerator-freezer combinations. Dealers invite women via direct mailings, newspaper, radio and television, or window displays to come into the store to receive their gift and see the appliance.

A leading St. Louis dealer who has given away 1,000 saws said the increased traffic which resulted led directly to several sales.

Howard G. Parks, owner of H. G. Parks Furniture & Appliances, explained he used direct mail letters to 800 prospects as the main tool in promoting the saws. At least 400 saws were picked up as a result.

Parks also presents the saws at cooking schools.

"I've used no newspaper or radio and TV advertisements of any kind," he said. "The letters, cooking schools, and word of mouth have been responsible for the demand."

"For giveaways I've used yardsticks, egg separators, measuring spoons, aprons, pot scrapers, ladles, windshield scrapers, and cook books, but none compared with the saw as a promotional item."

A. H. Fihn, Sr., of Carson Union May Stern, also in St. Louis, said: "We've had more calls on the saw than on any other gift. It's an unusual idea and one that seems to arouse a lot of customer interest."

Fihn said his store, which first ordered 1,000 saws and then 4,000 more, had used newspaper and radio ads and is planning to use television.

Gene Strauss of Mayflower Sales Co., St. Louis Norge distributor, told how one store kept the saws in the freezer compartments of the refrigerators. That, he said, provided an excellent introduction for the dealer to demonstrate the refrigerator before he presented the saw.

In all, Strauss said, some 17,000 saws had been ordered by about 100 St. Louis dealers, and it was expected an additional 13,000 would be used.

Paul G. Hagedorn of Harry

Knodel Distributing Co., Norge distributor in Cincinnati, said the frozen food saw has proved popular in that community, also. He described Cincinnati as a price market now, but, he said, dealers throughout the town have been high receptive to the saw.

Ray W. Horak, sales manager of Roth Appliance Distributors, Milwaukee, said: "The saws are moving well, and we've had to re-order several times."

Several Norge dealers in Wisconsin have sponsored spot ads on broadcast cut-ins for Milwaukee Brave games, he said.

Hot Salesmen Pick Cool Prizes

PHILADELPHIA—A 3-lb. steak every week for a year . . . or a range . . . or a deluxe air conditioner.

Winners of a three-month RCA air conditioner sales contest conducted among eastern wholesalers had their choice of these unusual prizes. The first and second place winners, Jack Shore and Al Smith of Raymond Rosen & Co., chose the air conditioner.

Merchandiser Offered For 'Home-Aid' Freezer

PHILADELPHIA—The Enterprise Mfg. Co. of Pa. here is making available free of charge through its distributors and representatives a counter merchandiser for its new "Home-Aid" ice cream freezer.

The freezer makes ice cream in the ice cube compartment of the user's refrigerator in from 35 to

45 minutes "without salt, ice, or mess," according to the manufacturer. Dealers desiring to obtain one of the merchandisers are invited to write to the company or contact representatives.

TV Playhouse Offer Gets 78 Calls In 15 Minutes For Milwaukee Distributor

MILWAUKEE—Philco Corp. got fast action here when it urged viewers of Philco Television Playhouse to call Western Union collect and request a free demonstration of home air conditioners.

Seventy-eight persons had made such requests within the 15 minutes following the program's termination, according to Electro-Plance, Inc., local Philco distributor. Hot weather in Milwaukee the previous week was credited with an assist for the excellent response. Requests for demonstrations were turned over to dealers.

Gibson Names C. L. Lannin Merchandising Specialist

GREENVILLE, Mich.—J. L. Johnson, vice president in charge of Gibson sales for the Gibson Refrigerator Co., announced the appointment recently of Clifford L. Lannin as Gibson headquarters merchandising specialist.

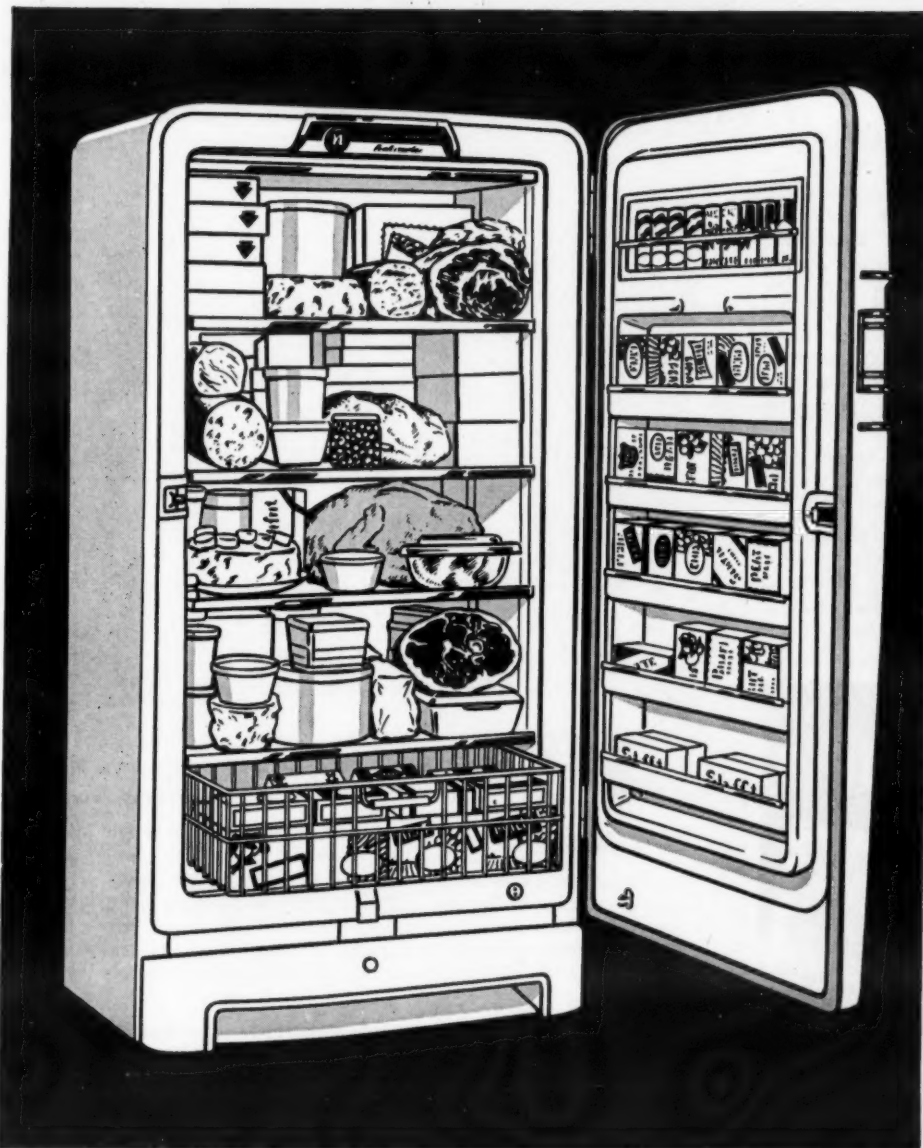
Lannin will travel extensively assisting Gibson distributors in all aspects of sales activity. His is the second such appointment recently.

Johnson indicated that the two merchandising specialists have been assigned as a result of Gibson's interest in actively supporting its dealers and distributors.

Bank Addition Air Cooled

NEW ORLEANS—The Metairie Savings Bank & Trust Co. has opened a new air conditioned addition at 3338 Metairie Rd.

There's nothing like the NEW NORGE FREEZER at any price!



Norge VHF-1200: 12.8 gross, 12.1 (NEMA) cubic foot net capacity at the low price of \$399.95.

NORGE scores again with another first with more features at an unbeatable price!

More cold than you'll ever need! As low as 52° below freezing! Norge's exclusive Jet-Freeze shelves circulate more cold faster for safer food storage and extra speedy freezing.

More features that are sales clinchers! Handidor and Juice Rack; Automatic Signal Lite; Safety Lock and Key; Adjustable Shelves; Big 420-lb. Capacity; Roll-out Basket; Special High-Density Glass Fiber Insulation. And many more.

5-year food protection warranty. Included at no extra cost to you or your customers. Covers food spoilage due to mechanical failure.

Beautifully styled to match the fast-selling Norge Model 1180 Customatic Refrigerator-Freezer combination. Here's the "Food Saver Team" that has the whole industry talking.

Norge is going places. If you want to carry the line that's really moving today, call your nearest Norge distributor. Maybe there's a franchise open for you.

Servel Sets Out To 'Blanket The Market'

EVANSVILLE, Ind.—A "blanketed" market is the literal result aimed for by a nationwide promotion on Servel room air conditioners announced by G. H. Christine, product manager of Servel's room air conditioner division.

He said that beginning immediately in this "Blanket The Market" campaign electric blankets will be given away to purchasers of Servel room air conditioners sold by the company's appliance dealers.

Buyers of ¾-hp. or 1-hp. deluxe models can choose a dual-control blanket or two single-control blankets for twin beds. A single-control blanket goes with each ½-hp. or ¾-hp. casement window model or the ¾-hp. standard model. All blankets are a full 72 by 84-in. double-bed size.

Christine added that the blankets are a well-known name brand and that they represent retail values up to nearly \$60.

NORGE

MEANS BUSINESS . . . GOOD BUSINESS

DIVISION OF BORG WARNER • MERCHANDISE MART, CHICAGO 54 • IN CANADA: ADDISON INDUSTRIES, TORONTO



'Sack-O-Circles' Campaign Set for Icemaker Sales

EVANSVILLE, Ind.—"Free ice cubes for your party" is the theme of Servel's new hot-weather "Sack-O-Circles" dealer promotion campaign for "automatic icemaker" refrigerators.

David K. Patterson, sales promotion manager of Servel, Inc., describes the Sack-O-Circles campaign as "a program to build floor traffic and sales."

He said that participating dealers "harvest" the ice-circles produced by their automatic icemaker floor models and store them in Servel home freezers. The ice-circles are then given away free on request. Newspaper ad mats offering the free ice-circles are available to the retailers.

Tough, well-insulated bags are provided in which takers can carry the ice-circles home. Each bag bears a sales message proclaiming that there is "No need to beg, borrow, or steal ice cubes ever again once you own a Servel 'automatic icemaker' refrigerator."

Patterson said the promotion kit also includes motion flip cards which show the refrigerator's ice-making process, and plastic ice-circles for displays and souvenirs.

Air Conditioning Ducts Put In Model Home's Plastic Floors

NEW YORK CITY—Plastic floors containing ducts for air conditioning, wiring, and piping are among the unusual features of a model house which General Electric Co. predicts will be built full size in 10 years.

The model, designed by Eliot Noyes, New Canaan, Conn., architect, has a plastic dome. Front and back walls are of glass and other walls are plastic panels. Plastic is also employed for the inside partitions between rooms, wired to furnish a curtain of light between two rooms.

Hoffman Named To Manage B & G Air Conditioner Sales

PITTSBURGH—B & G Sales Co.'s appointment of Arthur R. Hoffman as manager of air conditioner sales was announced recently by Eugene S. Cohen, vice president.

Because of an increasing demand for air conditioning on an "every-room basis," Hoffman plans to expand the company's program to industrial and commercial concerns, according to Cohen. The company's air conditioner combines heating and cooling in one unit.

INSIDE DOPE

Learn to live and laugh—
Thus delay your epitaph

By GEORGE F. TAUBENECK

(Concluded from Page 1, Col. 1)

town—and not be a flop at home? Earning a living debilitates his energies. Hence, he's in no mood to spout "sweet nothings," go out partying, or be a lusty bull in the bedroom after:

"Old B. G. on the rampage again . . . made up two carloads of No. 23A Freebles for Syracuse only to have them wind up in New Orleans . . . signed a contract for 10,000 breeg-lined gissipels to be delivered before the first of July . . . underbid the A. & M. Company . . . say, you know what, they're making me Vice President in charge of Transbilging with a raise in October . . . we got the order for 50,000 glass containers for prims just before Washington cracked down . . . say, Helen, I took care of that little matter at the bank you asked me about . . . I had a check deposited to your account.

"At this point Helen leans down and kisses Bill on his bald spot. She can afford to be sweet, can't she? That's the last she sees of Bill, who trots off happily to his quarters serene in the knowledge that he has fulfilled his function and that nobody is going to bother him any more. It has been a rough day at the office and he certainly doesn't feel like writing Helen a poem, or going to the Stork Club to dance."

Say Hey, fellow males—great? Let's go back to the Gallico story:

"It is now the turn of Luis Ramirez, the Escort, who appears immaculately clad in black or white tie, as the occasion demands, smelling sweetly of Old Spice, or L'Homme, or Essence Masculine, a white or red carnation in his buttonhole. Helen has by now changed to evening dress. Luis comes forward, kisses her hand and says 'Bot, my dear, you look mos' charming. I theenk thees new dress you have make you look like vary young girl.'"

You wouldn't get a speech like this out of a businessman, but it does start the evening off right.

To learn how the poet and El Toro function, you'd better buy a copy of the July *Esquire*. However, we can't resist appending author Gallico's final paragraphs.

"How often are we not exposed to some dame's crotchets because the Toro in her old man happens to be at low ebb, or because the Poetry Department has not been functioning since the days of the courtship, or because Romeo's paunch, sciatica, or sheer inertia will not permit him to get out on the floor and execute the Samba? Under the old system, there is always something about which mother's nose is out of joint.

"No woman married more than five years, with whom I have discussed this plan, has greeted it with less than the greatest enthusiasm and seemed anxious to begin. In fact, several gave me to understand that there was nothing so new about my scheme. They had been experimenting with it privately and happily for years."

Keep Your Eye on This Lad

A 23-year-old Texan, working his way through college, has been nominated as the "champion direct salesman of the year" by friends in the Lone Star State.

Charles A. Schnabel, Jr., a door-to-door salesman, was involved in a minor auto collision when his car struck another and caused damages exceeding \$100.

By the time the incident ended, a few hours later in a traffic court, Schnabel had:

1. Settled the damage claim for a six-month supply of his product.
2. Took an order from the traffic

officer who investigated the accident and hi-tailed him to court.

3. Sold a supply of the product to the judge before whom he was arraigned.

4. Signed up the judge and his daughter as salesmen for his company.

According to Nat Bernard, his employer:

"Charlie's amazing performance is a great example of a direct salesman who believes in his product and sells whenever and wherever he comes in contact with promising prospects."

The Origin of 'Hobson's Choice'

"Hobson's Choice" is a somewhat rueful phrase. It means no choice at all—take it or leave it.

Whence did it come? Recently we learned:

Thomas Hobson, a Britisher, kept 40 horses for hire. He had no competition, so he could do pretty much as he liked. Thereupon he insisted that every customer take the horse nearest the stable door.

No picking and choosing. Hence, "Hobson's choice."

Uncareful Thoughts

Too many people treat children like children.

America has the best yessed women in the world.

A good woman inspires a man;

a brilliant woman interests him; and a beautiful woman fascinates him. But it's the sympathetic woman who gets him.

A husband who is busy as a bee may find his honey missing.

Seven Ages of Parenthood

1. He's the most remarkable baby ever born.
2. He'll be President.
3. He's another Einstein.
4. He'll be heavy-weight champion of the world.
5. He'll settle down and have more sense as he grows older.
6. He takes after your side of the family.
7. Hope we can keep him out of jail.

Poet's Corner

This is the age
Of the half-read page
And the quick hash
And the mad dash.
The bright night
With the nerves tight.
The plane hop
And the brief stop.
The lamp tan
In a short span.
The big shot
In a good spot.
And the brain strain
And the head pain.
And the cat naps
Till the spring snaps—
And the fun's done.

VIRGINIA BRASIER

Perfect Parts . . . Made to Order

ALUMINUM Freezer LINER PANELS and SHELVING by REYNOLDS



Expect More—Receive More—With Aluminum Freezer Parts From Reynolds . . .

Take home freezer liner panels and vertical home freezer shelving for example. Reynolds manufactures these parts with tubing brazed in position so that it's an integral part of the unit. Furnace brazed, metal-to-metal contact means less tubing, which in turn means lower cost and also gives the ultimate in heat transfer. Freezer panels

and shelves are available in anodized finishes with plain or mar-resistant embossed surfaces. Vertical home freezer shelves are made of Reynolds special high strength aluminum alloys to insure maximum strength and rigidity. Freezer liner panels are shipped flat for savings to you . . . reach you ready for fast, easy assembly.

Expect More—Receive More—With The Help Of Reynolds Fabricating Specialists . . .

For superior freezer parts, as well as for highest quality aluminum refrigerator parts, you can depend on Reynolds Aluminum Fabricating Service for help on your design and engineering problems. Remember—Reynolds offers facilities, skill and experience. Aluminum offers rapid heat transfer, light weight, strength,* freedom from rust and stain, attractiveness and economy. Com-

bine the advantages offered by Reynolds Aluminum Fabricating Specialists with the benefits offered by aluminum and be sure of "perfect parts . . . made to order." For full details, contact the Reynolds office listed under "Aluminum" in your classified telephone directory, or write Reynolds Aluminum Fabricating Service, 2053 South Ninth Street, Louisville 1, Ky.

YOUR DOLLARS ARE STILL WORTH 100 CENTS IN ALUMINUM!



REYNOLDS ALUMINUM F

BLANKING • EMBOSING • STAMPING • DRAWING • RIVETING • FORMING • ROL

THERMOBANK

FOR Ammonia

by KRAMER

Ammonia System with KRAMER THERMOBANK is the unbeatable combination for low temperatures. Defrosting is completely automatic!



THERMOBANK installation at Crystal Creamery, Sacramento, minus 20° F., 5000 gallons hardened daily.
INSTALLED BY HAROLD HOLSTINE

THERMOBANK makes AMMONIA SHINE

WRITE FOR BULLETIN TA-162

KRAMER TRENTON CO. • Trenton 5, N.J.

Victor Two-Pronged Promotion Sells Dealers, Consumers on Freezer Benefits

HAGERSTOWN, Md.—A two-pronged campaign designed to tell "the truth about freezers" to both dealers and consumers has been launched by Victor Products Corp. here.

To stimulate dealer interest in freezer selling, the manufacturer has prepared a colorful presentation brochure telling him that freezer sales are continuing to climb and that the profit from the sale of a single home freezer is equal to that of several other appliances.

The profit on one 19-cu. ft. Victor Quickfreezer, the brochure asserts, equals that on three gas ranges, four television sets, 3 1/4 automatic washers, 7 1/2 vacuum cleaners, three refrigerators, or 22 table radios.

"The truth is the public wants Quickfreezers," the brochure declared, pointing out that in a recent survey of people interested in new kitchens, 30% wanted a home freezer and 22% planned to buy a new home freezer soon.

But, it emphasized, freezers aren't bought, they are sold. It told dealers that Victor is backing its freezer with "the greatest national advertising campaign in all freezer history" through *Life* magazine. In addition Victor is

offering dealers a direct mail food plan campaign (the dealer sets up the food plan with a local frozen food locker operator), a "pair and a spare" of nylon hose deal to offer women for witnessing a demonstration, and a variety of advertising pieces for dealer use.

FAMILY FOOD BUDGETS PREPARED

As part of the food plan campaign, the manufacturer has prepared typical family food budgets for various size families and provides the dealer with a series of charts giving prepared data on savings realized from various size food budgets, freezer costs per week, and average food costs for the different types of individuals that comprise the family.

The food budgets show what items can be purchased for storage in the freezer, what can be stored in the pantry, and what must be purchased fresh weekly. It compares the cost of weekly purchases with those of 16-week quantities by freezer owners. Based on typical costs, each budget shows approximately how much the family will save per year by purchasing on the food plan.

Victor's national advertising campaign to consumers was

launched in the June 7 issue of *Life*, when the company took two and a half pages of advertising.

One page was an essay-type advertisement in *Life* style telling the "truth about freezers." Half the page was devoted to a picture of the accumulated food that the average family eats in a year. Copy was devoted to answering the two questions: "Is the Quickfreezer an expense or an economy? Does it really save you money or is it simply a more convenient way of living?"

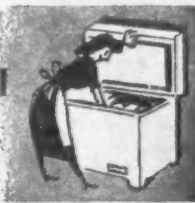
To answer them, Victor offered the following evidence:

"Perhaps the most important truth about owning a Quickfreezer is that you get more out of it than you put into it . . . in terms of convenience, easier shopping, better food . . . and money saving as well. The claims are true . . . but because every freezer owner is a different human . . . the value he or she will get from a Quickfreezer varies in degree.

"The average American family of four spends approximately \$1,300 a year on food. By buying meats and other major food items in larger quantities and storing them in a freezer, you can save tremendously over the cost of food purchased in small quantities each



HOME & FARM
FREEZERS



week. Obviously, too, freezer owners can save as much as 50% on some foods . . . but not on others. Actually the average total savings will be closer to 15% or 20%.

81% OF FREEZER OWNERS REPORT SAVINGS

"In a recent survey of almost 500 freezer owners, 81% said they 'saved money by owning a freezer.' At the same time, about half admitted that they had purchased a freezer which they now find is 'too small.'

"Until recently, the frozen food industry failed to keep pace with the growth of home freezers. . . . That picture has now changed. Freezer owners say that they purchased food for their freezers at a discount in supermarkets, at farms, chain stores, frozen food stores, frozen food locker plants. Eighty-seven per cent of the same owners state that they are completely satisfied."

A second full-page advertisement was devoted to product features. The half-page advertisement introduced "Betty Blake," Victor's home economist, who, the ad said, "has created a special food buying program that will be developed to your individual family needs." Headline proclaimed that "my family food budget can save you \$120 a year." A coupon was provided for persons interested in having a food budget prepared. Coupons received by Victor are being passed on to local dealers.

In addition to this spread, Victor said, the company will continue a series of half-page ads in *Life* throughout the selling season.

The company said that it is also prepared to run full-page newspaper ads in many local areas this summer and is planning to have its name and products shown and talked about on network radio and television quiz and prize shows.

Six-Piece Store Display Promotes Amana Freezers

AMANA, Iowa—A new freezer display made of self-sticking transparent cellophane for easy mounting on store windows or walls has been introduced by Amana Refrigeration, Inc.

The promotion package includes a 30-in. full-color figure of the Amana eskimo, plus five smaller cellophane signs indicating the top selling points of the "Stor-Mor" freezer line.

The display, which does not block out light, can be used with the single figure alone in the dealer's window or store; with the five illustrated signs centered around the freezer itself; or with the entire six pieces in the freezer demonstration area.

The store promotion is available to dealers through Amana distributors.

Mr. Peepers Show To Feature Jordon Freezer On Sunday, July 18

PHILADELPHIA—The Jordon "Hostess" (model J-16) upright home freezer will be featured on the Reynolds Metals Corp. show "Mr. Peepers," Sunday, July 18 on NBC, Harry Fogel, executive vice president of the Jordon Refrigerator Co., announced.

Jordon uses embossed aluminum for the interiors of its upright home freezers and in the "Duplex" refrigerator-freezer. The aluminum interiors have rounded corners and a minimum number of seams, insuring ease of maintenance.

Ohio Food Freezer Firm Holds First Convention

DAYTON—The Dayton firm of Robert J. Irvine & Associates, a business management consulting organization specializing in establishing food freezer plans, held its first semiannual convention here with about 100 men in the trade attending.

Donald C. Dickerson, executive assistant to Irvine, who heads the company, said discussion of the 10-year food freezer plan was the main theme of the convention.

He added that the company owns or has an interest in three food freezer clubs in Dayton, 15 others in the Miami Valley, and 28 total in a five-state area.

WALL WIRE PRODUCTS COMPANY

A FOREMOST NAME IN THE MANUFACTURE OF DIVERSIFIED WIRE PRODUCTS OF SUPERIOR QUALITY

ORIGINATORS OF WIRE & TUBE CONDENSERS FOR STATIC AND FORCED CONVECTION, AND OF WIRE & TUBE FREEZER SHELVES

STAINLESS STEEL SHELVES, SHELVES WITH CHROME PLATE, ZINC PLATE, PRO SEAL AND PORCELAIN FINISH

WIRE GRILLES - GUARDS MATERIAL HANDLING BASKETS MISCELLANEOUS FORMED AND WELDED WIRE ASSEMBLIES ARC WELDED ASSEMBLIES

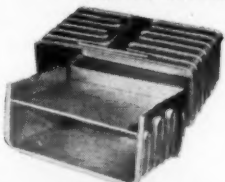
WALL WIRE PRODUCTS CO. PLYMOUTH, MICHIGAN

ALUMINUM— FIRST FOR EFFICIENCY AND SERVICEABILITY IN REFRIGERATION					
	Strength	Corrosion Proof	Rapid Heat Conductivity	Long-Lasting Attractive Appearance	Economy
Embossed Anodized Aluminum	✓	✓	✓	✓	✓
Plain Anodized Aluminum		✓	✓		✓
Stainless Steel	✓	✓		✓	
Ordinary Steel	✓				✓
Galvanized Steel	✓				✓

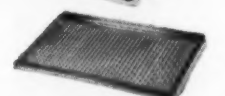
Write for your free copy of the new 16-page "Appliance Parts" brochure

See "Mr. Peepers" Sundays on NBC-TV. Consult local listings for time and station.

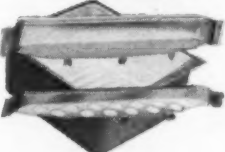
RELY ON REYNOLDS FOR THESE PARTS, TOO!



REFRIGERATOR EVAPORATORS
Reynolds Aluminum embossed and anodized refrigerator evaporators offer unequalled economy and efficiency in rapid heat conduction.



REFRIGERATOR SHELVING
Reynolds Aluminum one-piece color-anodized aluminum shelving provides rigid construction plus a corrosion-proof, chip-proof finish.



REFRIGERATOR PANS AND TRAYS
Reynolds Aluminum crisper pans and bottle, dairy, egg and utility trays are produced with color-anodized trim to your specifications.

M FABRICATING SERVICE

ROLL SHAPING • TUBE BENDING • WELDING • BRAZING • FINISHING

We Want 5 Representatives To Sell SCHAEFER FROZEN FOOD CABINETS

Our new policy of forming the Frozen Food Cabinet Division of Schaefer, Inc. enables us to expand our sales organization. Five excellent territories are open for experienced, aggressive representatives. These territories are:

1. Tennessee, South Carolina, Georgia, Alabama, Mississippi, and Florida . . .
2. Washington, Oregon, Idaho, Montana, and Wyoming . . .
3. California, Nevada, Utah, and Arizona . . .
4. Eastern Wisconsin, Illinois, and Indiana . . .
5. Kansas, Missouri, and Colorado.

This 25 year old company, one of the country's leading low temperature cabinet manufacturers, has recently introduced a complete line of frozen food merchandising cabinets enjoying excellent reception from the trade. If interested, write to Frozen Food Cabinet Division, SCHAEFER, INC., MINNEAPOLIS 1, MINNESOTA.



Stop service calls . . . keep out rust and sludge . . . open new doors to sales acceptance!—with coolers, ice-makers, sell "Taste-Master"!—checks chlorine, traps sediment; promotes service-free satisfaction with all water processing appliances. Write—

Filtrine MANUFACTURING CO.
BROOKLYN 38 • N. Y.
"Water Coolers and Filters for 40 Years"

Redmond
MICROMOTORS
One of largest stocks
in the world!
FACTORY DISTRIBUTORS
CYCLO-FREEZ CORP.
MARVIN L. "FERGIE" FERGATAD
P.O. Box #6, Dept. A, Mpls. 16, Minn.
MOhawk 9-6794

Restaurant & Bar Equipment

Experts Tell Where and How To Find Customers for Ice Making Machines

SYRACUSE, N. Y.—Where do you find customers for ice making machines?

That question was answered recently by four men who ought to know. They won high honors in the second annual Carrier "Ice-maker Sweepstakes" sales contest.

Cited by them were such sources of sales as small summer resorts, diners, road houses, factories, a hospital, a Mississippi excursion boat, and gasoline stations.

One of the prize-winning salesmen is Ben Rader of Metropolitan Restaurant & Bar Equipment Co., Elmsford, N. Y. He captured first place in the eastern regional race and then went on to cop the top national award—an all-expense trip to Paris for two.

Rader reported that the new "Ice-maker" market he tapped this spring "came in like a gusher." He explained:

OFF THE MAIN HIGHWAYS

"I went off the main highways to sell the small summer resorts around Lake Mahopac and the sales piled up fast as word of mouth spread the news from one

owner to another.

"I sent an Ice-maker mailing to 5,000 names and returns are still tumbling in. In town I placed a few units in restaurants and drug-stores with luncheonettes but I did much better with diners and road houses and these food places gave me the most action from my direct mail campaign."

Other \$500 regional winners in the Carrier contest were Ed Marquez, Ed Marquez Co., New Orleans; E. A. Montgomery, Capital Restaurant Equipment, Charleston, W. Va.; and Richard O'Hara, Ace O'Hara Co., Phoenix, Ariz.

EXCURSION BOAT

Marquez sold 11 Ice-makers at one clip to the Dieu hospital for its kitchens and another four to a Mississippi excursion boat. The rest went one at a time to bars, restaurants, and motels around New Orleans.

Marquez said 50% of his sales came through cold canvassing and the rest from direct mail leads and tips from old customers.

Declared Montgomery: "I don't care what business a man is in—

if he uses ice, I can sell him an Ice-maker." Pointing out that he found a whole new market in factories, for example, Montgomery said:

"Some plants down here spend as much as \$3,000 a year for ice to cool drinking water for their employees. Now they're saving money with the Ice-makers I've sold them."

GASOLINE STATIONS

O'Hara reported that his best market for Ice-makers this year will amaze you. "Most of my sales were made to gasoline stations."

"I sold a couple of units last year to those boys out on the highways and they cleaned up last summer selling ice at 25 cents a bag to motorists crossing the desert. So I concentrated on that new market and it certainly paid off for me."

"In town I sold two Ice-makers to the Mountain State Telephone & Telegraph Co. and the rest went into regular markets."

Brobst, Kleiman, Xavier S. & R. Representatives

NEW YORK CITY—S. & R. Soda Fountain Mfg. Co. here, custom manufacturer of soda fountain and food service equipment, has announced the addition of three factory representatives to its staff.

They are Robert G. Brobst of Dallas, who will handle the southwest territory; Samuel Kleiman of Harrisburg, Pa., who will cover the middle Atlantic area; and George J. Xavier of Toronto, Can., who will work with Ray Prescott, S. & R.'s Canadian representative.

Emporia Firm Moves

EMPORIA, Kan.—A new business building has been built for the Bob Crawford Refrigeration Co. at 920 Commercial here.

The block structure has a diagonal front with limestone trim and is 25 by 115 ft. in size. The Crawford firm was formerly located at 6 Mechanic St.

A display room is situated in

the front of the building. The new site also provides offices, a large workshop, and storage areas. A truck parking space is in the rear.

The Crawford building has a Carrier combination heating and air conditioning unit.

The Bob Crawford Refrigeration Co. has just installed a new 25-ton air conditioning plant at the Strand Theater here.

Voelkel Heads Department For Commerce Refrigeration

SAN ANTONIO—W. C. Voelkel has been named to head the commercial refrigeration department of Commerce Refrigeration Co. here, Eugene Bohné, Jr., announced recently.

In his new position, Voelkel will handle the distribution, installation, and service of Friedrich commercial refrigerators. He once operated his own dealership here.

Commerce Refrigeration is the local Friedrich dealer, handling that line exclusively. Bohné is also distributor for Friedrich in Bexar and 27 surrounding counties.

Montreal Firm Added to La Crosse Field Force

LA CROSSE, Wis.—Addition of REMA Refrigeration Mart, Ltd., Montreal, Quebec, Canada, to the field sales force of La Crosse Cooler Co. has been announced by R. S. Denzer, president of the latter firm.

Denzer said the appointment gives La Crosse Cooler more thorough representation throughout the Maritime Provinces and will enable the company to work more closely with its dealers in that area. He added that the well-known Montreal firm has had extensive refrigeration and sales experience.

George Weigand Dies

SYRACUSE, N. Y.—George F. Weigand, 56, who operated a refrigerator repair service here, died recently at his home.

HERE'S WHY

PENN WATER VALVES stay on the job much longer



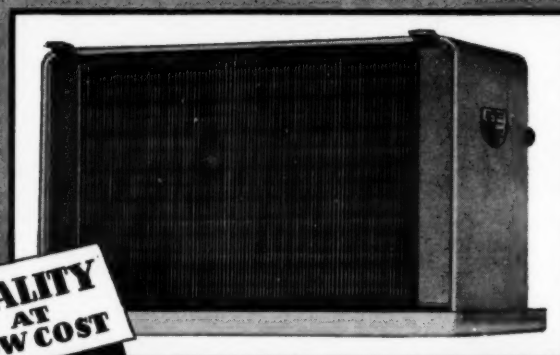
And the Penn water valve is very sensitive to changes in refrigerant head pressures to assure highest operating efficiency. Try the Series 246 on your next refrigeration job . . . you'll discover it will *stay on the job* much longer than other water valves.

Sizes from 3/8" to 2 1/2" in flanged and threaded styles . . . also available for temperature actuated service. Ask your wholesaler or write **Penn Controls, Inc., Goshen, Indiana**. Export Division: 13 E. 40th Street, New York 16, N. Y., U.S.A. In Canada: Penn Controls Limited, Toronto, Ontario.

PENN
AUTOMATIC CONTROLS

FOR HEATING, REFRIGERATION, AIR CONDITIONING, GAS APPLIANCES, PUMPS, AIR COMPRESSORS, ENGINES

BETZ MODEL UC



QUALITY AT LOW COST

UNIT COOLER

MODEL NO.	BTU'S @ 1" T.D.	C.F.M.	COIL SURFACE	LIST PRICE
260-UC	260	485	82.34 Sq. Ft.	\$147.00
347-UC	347	680	109.39 Sq. Ft.	182.00
433-UC	433	760	121.49 Sq. Ft.	198.00
540-UC	540	995	154.13 Sq. Ft.	241.00
688-UC	688	1260	204.19 Sq. Ft.	307.00
867-UC	867	1670	256.50 Sq. Ft.	348.00
1080-UC	1080	1975	307.92 Sq. Ft.	411.00
1490-UC	1490	2770	443.14 Sq. Ft.	534.00

SEE THEM AT YOUR WHOLESALERS

BETZ CORPORATION
HAMMOND ★ INDIANA



AIR CONDITIONERS

Denver Distributors' Letter Contest Gets Air Conditioner Story Across to Public

DENVER—To offset the general unfamiliarity of the public in cool Colorado with package air conditioners, eight major distributors here teamed up in a novel "educational program."

Designed to bring the average homeowner into any of 110 dealer stores in the area, the program offered two package units per day from June 14 through June 29 as prizes in a general "Refrigerated Air Conditioner Contest."

Contest rules require only that the homeowner or housewife visit any appliance dealership which displays package room conditioners, go through a demonstration, and then write a letter on "What Air Conditioning Would Mean to Me" or a similar title. The dealer must then certify that the entrant has been given a demonstration, on the letter itself.

The *Denver Post* is headquarters for the contest, printing entry blanks and collecting the entries for judging by a committee representing distributors and dealers.

Brands offered by the respective distributors include Admiral, Amana, Capitolaire, Chrysler, Cold-

spot, Crane, Deering, Emerson, Frigidaire, General Electric, Hotpoint, International Harvester, Mitchell, Philco, RCA, Servel, Victor, Vornado, and Westinghouse.

The goal of the contest will be the development of buying interest in an area which is probably less familiar with them than any other in the nation, according to the cooperating sponsors.

"Denver has shown a steady increase in temperature during the summer months for the past 11 years," it was pointed out, "which means that home cooling is definitely becoming a need. Through the contest we will have an opportunity to familiarize thousands of people with package conditioners, most of whom have never given them any previous thought."

Winners are being announced daily in the *Denver Post*. For the first award, 1,230 letters were submitted, and dealers were reporting heavy traffic of interested contest entrants.



ROOM COOLER DISPLAY rack allows Scruggs, Vandervoort, Barney department store to exhibit 12 brands of room air conditioners to give the public an opportunity to compare the several makes.

Display Rack Allows Customers To View Many Brands of Room Air Conditioners

ST. LOUIS—The fact that package air conditioner sales in the appliance department of Scruggs, Vandervoort, Barney, department store here, are well ahead of last year's figures is credited in part to an impressive "multiple choice" display fixture.

Erected early in April, well before the first spell of hot, humid weather struck St. Louis, the big display fixture showed 12 brands of room coolers in 1/2, 3/4, and 1-ton capacities, in two banks flanking the entrance to the appliance department.

The 22-ft.-long fixture angles around the wall of the department entrance and, extending to a height of more than 6 ft., can actually accommodate 18 coolers, with an additional row of six along the top.

Brands which were being featured by buyer Robert Zeller included Fedders, Servel, Van Aire, General Electric, Mitchell, Crosley, RCA, Hunter, Deering, and Chrysler. Small displays to either side showed such developments as Chrysler Airtemp's new casement conditioner.

The store broke early with the most intensive room cooler advertising program in its history, and small signs throughout all floors invited shoppers to visit the "Comfort Cooling Center" as the extensive display fixture and surrounding areas has been titled.

All charge accounts were circulated with direct mail which reminded them of St. Louis' steamingly hot 1953 summer season, indicated credit plans available, and invited them to "avoid the rush" with early installation.

Outside selling and quick follow-up on all telephone inquiries, etc., plus the extensive line-up of brands, are expected to make this a record room cooler sales year.

N. Y. Distributor Schedules 70 TV Spot Announcements On Fedders Room Coolers

NEW YORK CITY—L & P Electric Co., distributor of Fedders room air conditioners in the New York metropolitan area, planned to augment its television advertising with a program of 70 one-minute spot announcements on WABD.

Schedule calls for 10 night-time spots each week for seven weeks, according to Stanley Fried, advertising manager.

L & P is currently co-sponsoring with Fedders five announcements each week on Dave Garraway's "Today" program on WNBT.

May Room Units Sales In West Penn Territory Up 14% Over Last Year

PITTSBURGH—Contrary to the trend elsewhere, more room air conditioners were sold during May in the southwestern Pennsylvania territory served by the West Penn Power Co. than in any May on record, the utility reported recently.

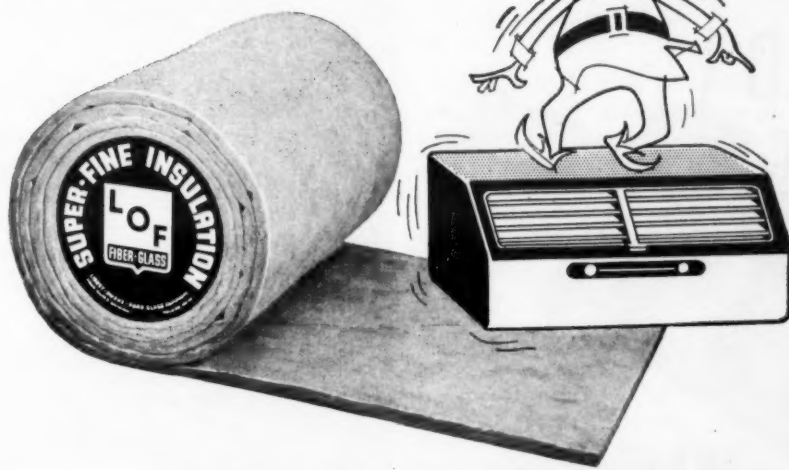
The 170 units sold during the month represented a 14% gain over May, 1953. Only other major appliances to show a sales gain for May over last year was the garbage disposer. Sales of this appliance were up 30%.

Clothes dryer sales, as compared with last year, were down 7%, automatic washers 8%, home freezers 10%, ranges and conventional washers 19%, dishwashers 20%, refrigerators 21%, and water heaters 26%.

Comparative unit sales for May and May, 1953 were as follows:

Appliance	May 1954	May 1953
Room Air Conditioners	170	149
Refrigerators	1,296	1,634
Freezers	286	317
Ranges	748	921
Dehumidifiers	6	...
Garbage Disposers	30	23
Dishwashers	42	52
Clothes Dryers	246	263
Ironers	62	102
Automatic Washers	466	503
Conventional Washers	996	1,218
Water Heaters	316	425

Your air conditioner cools, and it dehumidifies. But—how about noise control?



Use L-O-F Fiber-Glass for Noise Control

This flexible, blanket-type Super-Fine Fiber-Glass absorbs airborne sounds in the middle- and high-frequency ranges. For highest sound-absorbing efficiency, vinyl-faced Super-Fine is recommended.

New L-O-F High Density Super-Fine Fiber-Glass reduces noise created by vibration. It can be molded into housings and other shapes.

L-O-F Super-Fine Fiber-Glass is easily handled, cut and installed. The fine glass fibers will not rot, mildew, burn, absorb moisture; are verminproof, rodentproof.

For further information, contact your nearest L-O-F office (offices in 26 major cities). Or write: Libbey-Owens-Ford Glass Co., Fiber-Glass Division, 44-74 Wayne Bldg., Toledo 3, O.



"Trouble-free performance... makes satisfied customers for me," says Ernest W. Farr, Bell Refrigerator Co., Cleveland.

TO GET ON THE MOST PROFITABLE FACTORY-DEALER TEAM IN THE BUSINESS, TIE UP WITH

TYPHOON 794 Union Street, Brooklyn 15, N. Y.

*COMMERCIAL AIR CONDITIONERS, 2 TO 35 TONS
*RESIDENTIAL YEAR-ROUND UNITS FOR GAS OR OIL
*ROOM AIR CONDITIONERS, 1/2, 3/4, 1 TON
*PACKAGED HEAT PUMPS, RESIDENTIAL & COMMERCIAL



NEMA Refrigerator Sales By Distributors by States For First Quarter

Summary for First Three Months, 1954
Sales of electric household refrigerators
by distributors to dealers—by states.

Reports were received from 13 companies.

States	Units
Alabama	8,608
Arizona	4,050
Arkansas	6,466
California	56,905
Colorado	5,793
Connecticut	18,184
Delaware	2,141
District of Columbia	11,000
Florida	21,578
Georgia	13,113
Idaho	1,442
Illinois	44,606
Indiana	21,062
Iowa	10,964
Kansas	6,780
Kentucky	10,079
Louisiana	11,238
Maine	3,061
Maryland	10,304
Massachusetts	20,771
Michigan	37,242
Minnesota	11,901
Mississippi	5,397
Missouri	22,268
Montana	2,080
Nebraska	5,908
Nevada	1,165
New Hampshire	2,068
New Jersey	24,090
New Mexico	2,064
New York	95,237
North Carolina	14,041
North Dakota	2,318
Ohio	41,025
Oklahoma	9,479
Oregon	5,248
Pennsylvania	51,051
Rhode Island	5,776
South Carolina	6,153
South Dakota	2,976
Tennessee	14,668
Texas	34,644
Utah	2,476
Vermont	1,014
Virginia	12,332
Washington	7,288
West Virginia	8,317
Wisconsin	14,339
Wyoming	825
Total United States	726,532

Participating companies: Admiral Corp.; Appliance & Electronics Div., Avco Mfg. Corp. (Crosley & Bendix Divs.); Deepfreeze Appliance Div., Motor Products Corp.; Frigidaire Div., General Motors Corp.; General Electric Co.; Gibson Refrigerator Co.; Hotpoint Co., Div. of General Electric Co.; International Harvester Co.; Kelvinator Div., Nash-Kelvinator Corp.; Norge Div., Borg-Warner Corp.; Philco Corp., Major Appliance Div.; Servel, Inc.; Westinghouse Electric Corp.; A. J. Lindemann & Hoverson Co. (out 2-1-54).

The unit sales figures shown on this summary are not Factory Sales nor do they reflect the sales of all manufacturers. They represent Distributors Sales to Dealers for only those participating companies listed above.

G-E Names H. B. Miller And A. I. Christensen At Appliance Park

LOUISVILLE, Ky. — General Electric Co. recently announced the appointment of Halbert B. Miller as general manager of Appliance Park's specialty refrigeration products department.

He fills the vacancy of Harold B. Donley who is on special assignment for the major appliance division.

In another specialty refrigeration department change, Arthur I. Christensen was named manager of finance in the cost accounting department.

Miller joined G-E in 1936 as a student engineer. He served in a number of capacities in manufacturing, personnel, and wage rate supervision before being named manager of manufacturing of the industrial heating department in Schenectady. He moved to Louisville in 1953.

Joining the company in 1948 as manager of marketing for the air conditioning division, Donley was appointed specialty refrigeration products general manager in 1952.

Deepfreeze Appoints Louisville Distributor

NORTH CHICAGO, Ill. — Electric Appliance Distributors of Kentucky, Louisville, has been appointed distributor for Deepfreeze Appliance Div., Motor Products Corp., according to L. R. Walker, manager of field sales.

The Louisville firm will cover a territory comprising most of Kentucky, including Louisville, Lexington, Bowling Green, and Owensboro, as well as some southern counties in Indiana and Illinois, including Evansville, Vincennes, and Harrisburg.

Officials of Electric Appliance Distributors include J. C. Carney, owner, and Charles Havill, sales manager.



DEHUMIDIFIERS installed in basement of Racine Hydraulics & Machinery, Inc. save the firm more than four times their original cost per year by cutting damage from moisture in basement storage area. Eight units are said to remove as much as 24 gals. of water every 24 hours.

8 Dehumidifiers Save \$4,000 Yearly By Cutting Rust Damage In Basement

RACINE, Wis. — Saving of more than \$4,000 a year reportedly is being realized by Racine Hydraulics & Machinery, Inc. here through the use of eight dehumidifiers in the basement storage area of this plant.

This annual saving is more than four times as much as the original purchase price of the Westinghouse units, it was pointed out.

The dehumidifiers prevent for-

mation of rust on both finished products and parts awaiting assembly in the firm's 70,000-cu. ft. basement storage area by removing as much as 24 gals. of water from this area every 24 hours. Cost of operation is about the same as 15 100-watt light bulbs.

William Reinhardt, Jr., plant superintendent, said the use of the dehumidifiers has not only resulted in the saving of money, but

also of time and inconvenience and in the improvement of working conditions.

"With the units," said Reinhardt, "we showed a reduction of relative humidity of about 20% after a three-month check."

"Without the units in 1952, we experienced heavy rust damage and this resulted in costly de-rusting operations and production slow-downs. During 1953 with the Westinghouse units in operation, no appreciable rust damage was experienced."

Racine Hydraulics manufactures hydraulic power equipment, such as pumps, valves, boosters, and metal cutting machines, and a line of railway maintenance machines.

Seeger Earnings Rise In Spite of Sales Dip

ST. PAUL — Seeger Refrigerator Co. recently reported net earnings of \$4,498,852 after income tax provisions in the nine months ended May 31, 1954, compared with \$3,830,998 in the corresponding period a year ago.

The nine-month earnings were equal to \$4.01 a share on 1,120,800 shares of Seeger capital stock outstanding, as against \$3.43 on the same basis in the three quarters last year.

Sales totaled \$84,163,046, compared with \$87,621,306 in the like period a year before.



ONLY NEW REMCO E-Z-SEE LIQUID INDICATORS ARE HERMETICALLY SEALED

Guaranteed from highest vacuum to 500 p.s.i. Only Remco offers hermetically sealed sight glasses! Double port, for E-Z to SEE viewing of bubbles in refrigerant lines, these indicators are suitable for use with both Freon-12 and Freon-22.

COMPLETE LINE:
1/4" thru 5/8" with Flare Fittings
3/8" thru 2 1/8" with Sweat Fittings

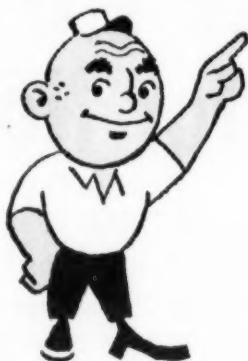
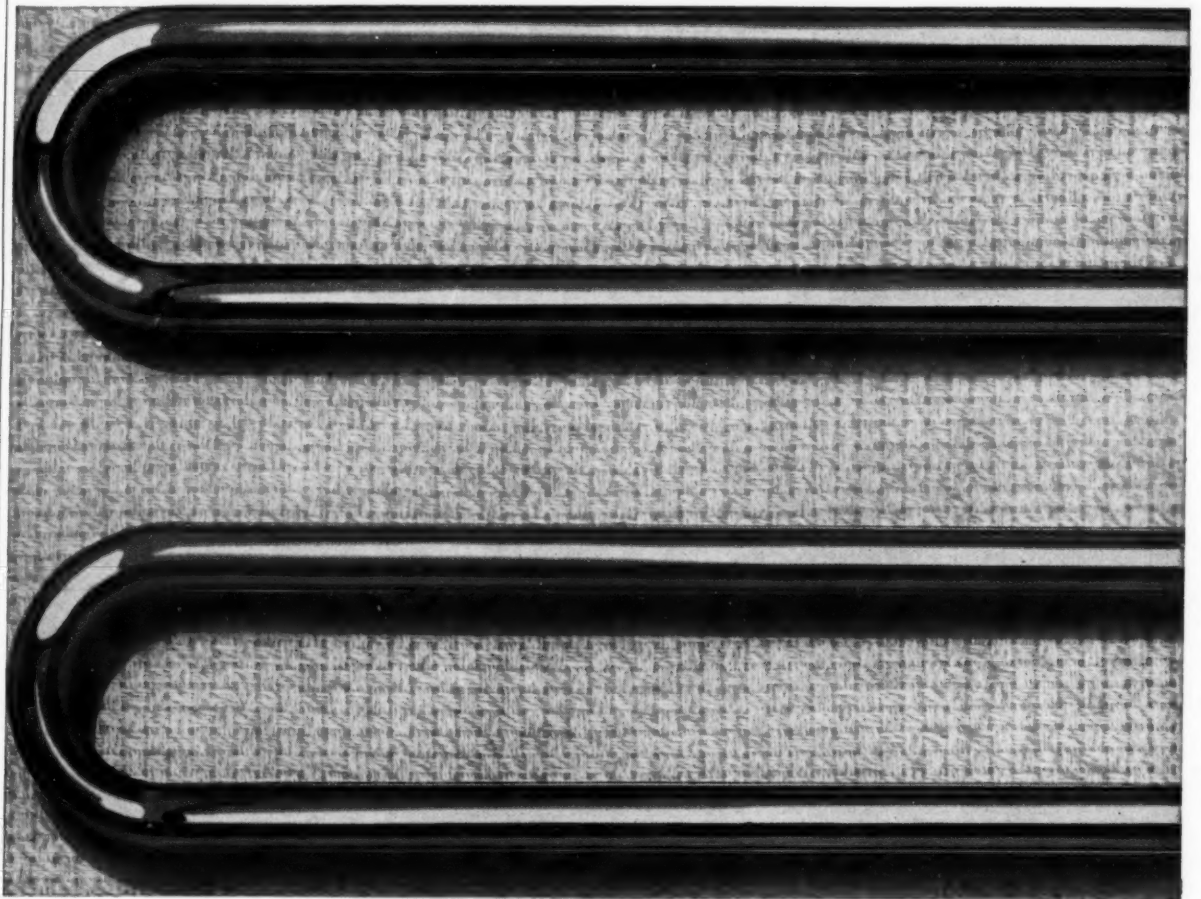
Ask for E-Z-SEE combination
INDICATOR-DISTRIBUTORS
for Multi-Capillary Tube Applications



Available in Brass or Low-Cost
Electro-Zinc Plated Steel

FLO-INDICATORS and DUST COVERS
optional on most sizes

CARRIED IN STOCK BY LEADING WHOLESALERS EVERYWHERE



Portrait of the coil that stays sold!

WHY BUNDYWELD IS BETTER TUBING



Bundyweld starts as a single strip of copper-coated steel. Then it's...



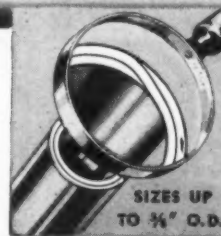
continuously rolled twice around laterally into a tube of uniform thickness, and



passed through a furnace. Copper coating fuses with steel. Result...



Bundyweld, double-walled and brazed through 360° of wall contact.



NOTE the exclusive Bundyweld developed beveled edges, which afford a smoother joint, absence of bead and less chance for any leakage.



AIR CONDITIONERS

Room Air Conditioner Sales Drop 31% In Philadelphia During Month of May

PHILADELPHIA—As elsewhere in the country, air conditioning sales, which had been doing fine for the first four months of the year in Philadelphia, slumped during May, the Electrical Association of Philadelphia reported recently.

Distributor sales of air conditioners were down 31% for May as compared with the same month in 1953. Sales for the five months, however, were substantially higher

than for the 1953 period.

Gains over last year were noted for dishwashers, which were up 39%, and ranges, which were 4% higher.

Refrigerator sales were down 19%, clothes dryers 22%, and home freezers 42% as compared with May, 1953.

Comparative figures for the month and for the five months are as follows:

Electrical Appliance	May, 1954	May, 1953	Total Jan. to May 31, 1954	Total Jan. to May 31, 1953
Air Conditioners	5,089	7,288	21,651	15,038
Clothes Dryers	445	576	3,345	3,299
Dishwashers	449	321	1,933	1,782
Home Freezers	770	1,312	3,580	6,698
Ranges	1,303	1,250	6,953	5,881
Refrigerators	5,378	6,563	27,073	29,323

Free Room Unit Offer Tempts Tenants for Apartment

NEW YORK CITY—A free ½-ton room air conditioner was offered to prospective tenants of a cooperative housing project in the Bronx here recently.

Newspaper advertisements offered an Emerson unit to anyone renting either a 4½ or 5½-room apartment located in Wakefield Gardens.

'Before and After' Story of Air Conditioning In 'Companion'

National Magazine for Women Tells Graphically Of Room Cooler Benefits

NEW YORK CITY—Multiple benefits of air conditioning as offered by a window unit are graphically presented in the June issue of *Woman's Home Companion* in a two-page presentation of what it did for one family.

"Before and after" sketches by Roy Doty enliven the article prepared by Betty Wadsworth of the magazine's home equipment staff, who writes:

UNIT IN BEDROOM

"Last year the Harper Landells of Broadaxe Village, Pa., got tired of battling the hot, humid summer weather and decided to do something about it. An air conditioning unit seemed to be the logical answer.

They decided to put the unit in their bedroom because sleeping was one of their main discomforts. This location, they figured, would put the unit to the real test.

"Things went well from the start. Installation was quite simple, as anchoring the unit securely into the window frame offered no special problems and neither did the wiring. Before installing their ¾-hp. unit, they had their wiring

BEFORE



Hot weather found Jeanne limp and listless with no energy for getting chores out of the way.



Summer was a weary round of dusting and cleaning with windows open and dirt drifting in.

AFTER



In comfortable surroundings she's full of pep and feels like tackling both jobs and hobbies.



Things stay clean longer now that windows are closed and the incoming air is filtered.

carefully checked to make sure it was adequate for efficient operation of the equipment.

"The air conditioning unit more than lived up to the Landell's expectations. When the summer nights became hot and sultry they slept blissfully through it all and woke up fresh as daisies. The conditioner always kept the room at just the right comfortable temperature they had selected—never too cool—and the humidity was low, too.

"Control of the equipment was easy as could be. Setting a few dials did the trick. They were pleased to find how quietly the unit ran, considering the work it did so effectively.

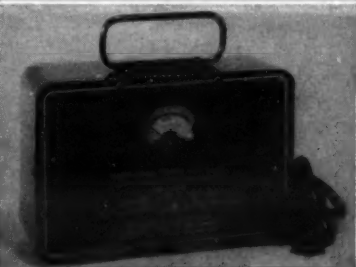
FAMILY LIVED IN BEDROOM

"In fact, the bedroom was always so comfortable that during really hot spells they would spend the evenings there since it was the only cool place around—not excepting their attractive patio. Jeanne Landell even took her ironing board upstairs on those hot days and did the family ironing; and the children, Lynne and Ricki, seem to prefer playing there, too.

"About this time Jeanne and Harper decided that as soon as they could they'd add more units—one for the children's room and one for the living-room where they could share their pleasant climate with their friends."

CARTOONS by Roy Doty enliven story of how life changed for the Harper Landells after they installed room air conditioners in their home. The article appeared in the June "Woman's Home Companion."

ATTENTION!! Room Air Conditioner Dealers & Installers DON'T BE WITHOUT A . . . HACO LOAD-VOLTAGE ANALYZER



A Portable Testing Instrument that quickly determines WIREGUT the necessity of first installing the air conditioner the Voltage Adequacy of an electrical circuit for efficient usage of ½, ¾ & 1-HP Units (115 V).

- Will help overcome problems of inadequate Voltage & Overloaded Circuits.
- Make Room Air Conditioner Owners satisfied and happy.
- Will increase your Sales—An impressive Sales Tool.
- Sturdily constructed. Will give accurate performance to user in the field.

ORDER NOW . . . Only \$34.80 ea. Jobbers: Exclusive Franchises available.

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NEW PRODUCTS?
Turn to "What's New" Page for useful information on new products. Use Key No. for fastest service.

Another Bundy-pioneered idea which saves you time and money

HERE at Bundy we don't rest on our laurels just because we produce condenser coils that will go on working faithfully through many years of efficient, leakproof service. We constantly improve on these condenser coils.

Take the strainer application above, for example. Instead of adding the customary separate tubular strainer between the end of the condenser coil and the capillary tube, Bundy built a small strainer into the condenser coil. The strainer, fitted to brass

collar, is press-fit into the expanded end of the condenser coil. The strainer end of the coil is then swaged at the tip joining the capillary tube. A joint is eliminated, saving time and cost of making additional expanded part and assembling it onto coil.

Bundyweld's ability to expand readily and without leakage makes this particular application possible. For example, Bundyweld expands from ¼" O.D. to ¼" I.D. The O.D. of the filter screen section is .170 O.D., which

slips inside the expanded section and guarantees a full 1/32" clearance all the way around the screen as it fits into the tube.

Solving problems like this one is a habit with us at Bundy. We offer unexcelled fabrication facilities, specialized engineering skills, and a conscientious devotion to our customers' problems. Perhaps we can help you, too. Why not call VA 3-1300 in Detroit for information on your applications.

BUNDY TUBING COMPANY
DETROIT 14, MICHIGAN

BUNDYWELD TUBING

DOUBLE-WALLED FROM A SINGLE STRIP

Bundy Tubing Distributors and Representatives: Bridgeport, Conn.: Korhmel Steel & Aluminum Co., 117 E. Washington St. • Cambridge 42, Mass.: Austin-Hastings Co., Inc., 226 Binney St. • Chattanooga 2, Tenn.: Pearson-Deakins Co., 823-824 Chattanooga Bank Bldg. • Chicago 32, Ill.: Lopham-Hickey Co., 3333 W. 47th Place • Elizabeth, New Jersey: A. B. Murray Co., Inc., Post Office Box 476 • Los Angeles 58, Calif.: Tubasales, 5400 Alcoa Ave. • Philadelphia 3, Penn.: Rutan & Co., 1717 Sansom St. • San Francisco 10, Calif.: Pacific Metals Co., Ltd., 3100 19th St. • Seattle 4, Wash.: Eagle Metals Co., 4755 First Ave., South • Toronto 5, Ontario, Canada: Alloy Metal Sales, Ltd., 181 Fleet St., East. Bundyweld nickel and Monel tubing are sold by distributors of nickel and nickel alloys in principal cities.

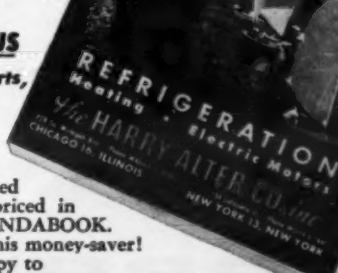
Here's Harry Alter's DEPENDABOOK No. 161... 1954

REFRIGERATION PARTS and Supplies plus

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"Harry Alter gives you snappy service."

Do Distributor Schools on Comfort Cooling Pay Off?

'Before Season' Sessions Afford Many Benefits, Say Airtemp Outlets

DAYTON—Does the distributor's school on air conditioning for retail dealers pay dividends?

Directed to two of Chrysler Airtemp's busiest wholesalers, S. S. Fretz, Jr. of Philadelphia and A & M Distributors of Red Bank, N. J., the firms replied, "Certainly."

According to William Hegge, president of the Philadelphia firm, the explanation of the affirmative answer is simple. "Both retailer and wholesaler make more money as the result of better sales techniques."

S. S. Fretz, Jr. is well established in Philadelphia as a wholesaler. The Fretz school was conducted for the eighth year. Under the direction of H. B. Schaeffer, the Fretz dealer course thoroughly covered air conditioning sales and application techniques.

School began Monday, Feb. 8, and continued with two-hour sessions every Monday evening for eight weeks. For their text, the Fretz "pupils" used Chrysler Airtemp's correspondence course in sales and application. All technical homework and correspondence school exercises were graded and prizes awarded.



"FULL HOUSE" ATTENDANCE at the S. S. Fretz, Jr. air conditioning school in Philadelphia for retail dealers and salesmen attests to high interest in such undertakings. "New dealers daily run into sales and application problems new to them," say distributors. "Schools help retailers disassemble and analyze each phase of particular problems, and assist in finding solutions peculiar to their own regions."

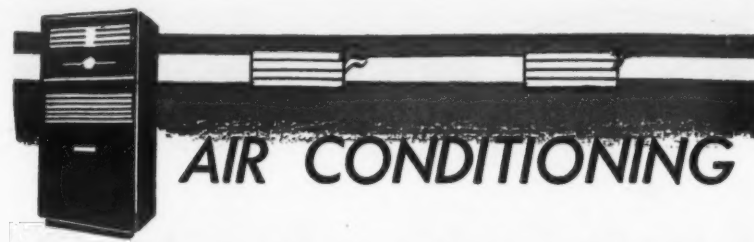
"Our course started this year with 52 candidates, some driving 80 miles to come. At the end of March, we awarded 52 certificates. This is evidence of the tremendous enthusiasm of the men actively engaged in the business of selling, installing, and servicing packaged air conditioning," Hegge related.

"Each man who completed the course is qualified to survey, size, lay out, price, and sell packaged residential and commercial air conditioning systems. This prac-

tice has developed our operation into one of Philadelphia's leading air conditioning businesses. So, we are sure our program is a good one," he concluded.

And in Red Bank, another less formal school session was conducted for the area's heating, plumbing, and air conditioning retailers by A & M Distributors.

Unlike Fretz in Philadelphia, the A & M firm owned by Jack Mount is new to the air conditioning wholesaling business.



First meeting took place on Wednesday, Jan. 6. About 75 independent businessmen were invited. Some 60 appeared. An average of 40 attended succeeding meetings, held on alternate Wednesdays.

Mount received an assist from Chrysler Airtemp's New York regional manager, Ned Foulds, who assigned an Airtemp representative to the A & M Wednesday "faculty."

Topics covered included air conditioning application, engineering, sales, service, and promotion. The question and answer method was used effectively—to the extent that none of the meetings broke up before midnight, although scheduled to end two hours earlier.

Obtaining new dealers was one of the purposes of the A & M sessions. To date, 25 dealers have agreed to purchase equipment from Mount, seven already have done so.

The results produced by the area's first course of its type were heartening to Mount. "The response to our first session indicated that such a program is needed. The continued high at-

tendance is proof that dealers are interested in learning as much as they can about air conditioning," Mount said.

One of the Mount's new dealers recently sponsored an Airtemp air conditioning display at an Asbury Park, N. J. home show. He secured more than 40 excellent prospects for residential air conditioning systems.

"The market is here in New Jersey," Mount declared. "We just have to design better ways to develop it."

In the same vein, J. F. Knoff, vice president in charge of sales, recently announced the expansion of Chrysler Airtemp's own factory-training program, and an increase in the amount of technical, sales, and promotional assistance provided distributors. This followed on the heels of Airtemp's adoption of a new wholesale distribution pattern.

Knoff has estimated that "there will be no fewer than 15 Airtemp distributors conducting formal sessions for retail dealers in their areas next year."

Carrier Installation for Dallas Statler To Have Special Room Controls

DALLAS—Signing of the contract for air conditioning the new \$15 million Hotel Statler currently under construction in Dallas was announced recently by Carrier Corp.

The newest and most modern structure in the Statler chain, whose hotels are located in nine other major cities across the United States, the Dallas hotel will also be one of the largest buildings in that city when completed.

Carrier's "Conduit Weathermaster System" will be used. It will employ 1,086 Weathermaster room units and control temperature and humidity, air cleanliness, circulation, and ventilation throughout all seasons. Occupants will be able to "dial their own weather" by means of individual room controls.

Two big Carrier centrifugal refrigerating machines producing a cooling capacity equivalent to the melting of 3,000,000 lbs. of ice per day will supply chilled water for air conditioning the "Y" shaped hotel's 1,001 guest rooms.

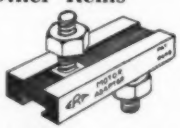
Architect for the 18-story building is William B. Tabler, New York City. Consulting engineer is Jaros, Baum & Bolles, New York. The general contractor is Robert E. McKee of Dallas, and mechanical contractor, J. S. Brown—E. F. Olds Plumbing & Heating Corp., El Paso.

Cool Church Auditorium

NASHVILLE, Tenn.—Belmont Heights Baptist church here will spend \$64,984.19 for heating and cooling a new auditorium. Work on the new project is expected to be completed in about 10 months, Dr. Harold J. Purdy, pastor, stated.

MOTOR BASE ADAPTERS Sell Many Other Items

Keep them in stock. Servicemen will pick up adapters and motors, carry them in their cars, and complete service on the job in one call. Eliminates delay of having motors away for rebuilding. Adapters are easy to install, fit any base. No rotor shaft too long or too short. They also bring you more sales in motors, belts, pulleys, controls, etc. SIZES FOR 1/2 to 3 H.P. Inclusive
Engineering Research Associates, Inc.
3475 East Nine-Mile Road
Hazel Park, Michigan



Rafoth In Dubuque Handles G-E Heating, Cooling Line

BLOOMFIELD, N. J.—Appointment of Rafoth Furnace and Sheet Metal Works, Dubuque, Iowa, as a direct served retailer for G-E home heating and cooling equipment has been announced by the General Electric Co.

The Rafoth firm will distribute the complete G-E line of heating and cooling equipment for the home in the city of Dubuque.

... filling the Cooling Water Requirements



with the New Ingersoll-Rand Motor-pump designed for air-conditioning applications—everywhere. It can help you with:

IMPROVED HYDRAULICS:

New design and construction features that give improved performance over its entire range of heads and pressures:

GREATER SPACE SAVINGS:

More compact, the new KRVS fits anywhere, does the maximum job in a minimum space.

LIGHTER WEIGHT:

Improved design makes the new KRVS the top performer in the field.

You should know more about KRVS; to get the whole story, mail the coupon to:

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11 Broadway, New York 4, N. Y.

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I would like to know more about how the Motorpump line can improve my jobs, help cut my costs. Send me details.

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AIR CENTER U.S.A.

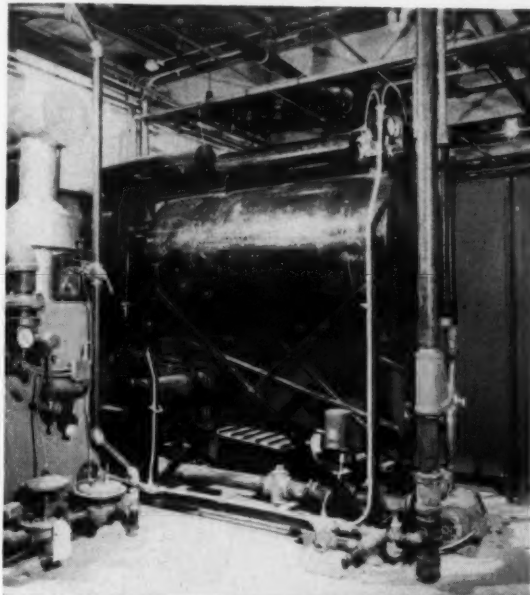
This modern well-equipped research laboratory might well be called AIR CENTER, U.S.A., for it is here that Torrington engineers design and test the fan blades and blower wheels which move the air in a large share of the nation's leading air-moving appliances. Here too there is available technical assistance on any design problem concerning air flow, sound, and vibration.

If you make or plan to make heating, ventilating or air conditioning equipment, we believe Torrington's vast fund of technical knowledge and experience as specialists in the design and production of air impellers can be valuable to you.

Torrington air impellers have long been accepted as representing a high standard of uniform construction, quiet performance, and efficiency. Torrington also offers you expanded, modern productive capacity, with fast and flexible scheduling of your orders. Put Torrington to work on your air moving problems. Our engineers and research facilities are ready, without obligation, to help you gain Increased Unit Efficiency—Speeded Production—Reduced Cost!

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AIR IMPELLERS



PLENTY OF "COOLTH" is in store for customers of the world's biggest diner, the "State," in Bloomfield, N. J. This Servel 25-ton water chiller is the heart of the largest air conditioning system ever installed in a diner.



PLENTY OF SEATING SPACE is available in the world's largest diner. Waitress familiarizes herself with new equipment prior to grand opening.

Big Diner In Bloomfield Uses 25-Ton Water Chiller for Air Conditioning

BLOOMFIELD, N. J.—The world's largest diner, which opened here recently, also claims to have the world's largest air conditioning system in a diner.

A 25-ton Servel model DUT water chiller is the heart of the system that serves the neon-lighted, stainless steel sheathed, \$250,000 "State" diner located at the corner of State and Liberty Sts. here. The L-shaped structure is 115 ft. long and contains 6,500 sq. ft. of floor space. It can serve 3,500 persons a day.

The air conditioning system was installed by Moran & Co. here with engineering design and technical assistance from Cooling Equipment Distributors, Servel air condition-

ing distributor in New Jersey.

Though the super diner resembles the standard diner with its counter seats and booths, it also includes a complete, compact kitchen set up in galley style. In addition the building has a full-size basement which houses a bakery, gas water heaters, gas-fired boiler, and the water chiller.

The diner itself was built by the Fodero Car Co. here in five custom-built sections. Each section was completely equipped at the factory and trucked to the site.

Pat Fodero of the manufacturing firm, said this is the largest single diner unit built by one manufacturer. It took eight months to finish.

Drugstore Reports Sales Rises Up to 250% After Installing Air Conditioning

FLORENCE, Ala.—Air conditioning is responsible for increasing sales throughout the Corner Drug Store here, believes pharmacist-owner Adin Batson.

Batson's figures reveal booming volume during ordinarily slack summer months last year, after installation of an air conditioner.

"Drugstore merchandising today requires more than a well-stocked store," Batson remarked. "Prospective customers insist on shopping in a drugstore where they are comfortable."

Here are some of the sales results of his air conditioning installation, as reported by Batson:

Baby department sales went up 200% during the hot months, and much of this increase was retained throughout the year. ("I doubt if anyone appreciates shopping in comfort more than an expectant mother," commented the druggist.) Fountain sales zoomed 250%.

A 45% annual rise in prescription sales was marked in the air conditioned store, with hot weather sales 100% above previous figures.

Batson said it was actually the reported experiences of other stores with air conditioning that prompted him to have his store air conditioned.

"It has proved to be one of the best investments I've made—one

which has been many times repaid, and one which promises permanent sales gains for the store," he said.

"Regardless of where a drugstore is located, it must have air conditioning if it is to successfully compete with more comfortable modern establishments."

Houston University Offers Degree In Air Conditioning

HOUSTON, Texas—A degree in air conditioning is offered by the University of Houston.

About 250 students have been enrolled this year in the Department of Air Conditioning and Refrigeration. The department is recognized by the National Engineering Council for Professional Development, and has complete training equipment for practical application as well as for instruction in theory.

Graduates receive an applied science degree in air conditioning and refrigeration, and are considered qualified technicians.

Engineering students at the university may also combine their majors with a two-year course in air conditioning and refrigeration, to graduate as air conditioning engineers.

Air Cooler Installed Outdoors To Save Market Floor Space

COLLEGE PARK, Md.—Outdoor installation of a 20-ton United States Air Conditioning Corp. self-contained central station air cooling unit saved floor space for the new Big Apple supermarket here.

Utilization of this equipment, which includes a built-in evaporative condenser for re-use of 95% of the system's water, limits water waste so that no drain connection is usually required.

Whybrew Heads Contract Div. for James & Roach

DETROIT—Norman M. James, president, James & Roach, Inc., Detroit air conditioning and heating contractor, recently announced the appointment of George H. Whybrew as vice president and general manager of the contract division.

A lifetime resident of Michigan, Whybrew has had a broad background in the mechanical engineering and contracting fields.

Kroger To Cool New Unit

GREENSBORO, N. C.—The Kroger Co. will establish a 120 by 150-ft. supermarket directly west of Burlington Mills Corp.'s executive offices here. Air conditioned, it will represent an investment of about \$300,000.

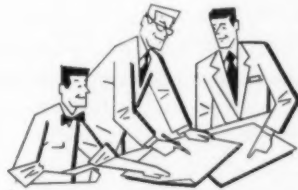


asked for

AIR FILTERS SECOND-TO-NONE

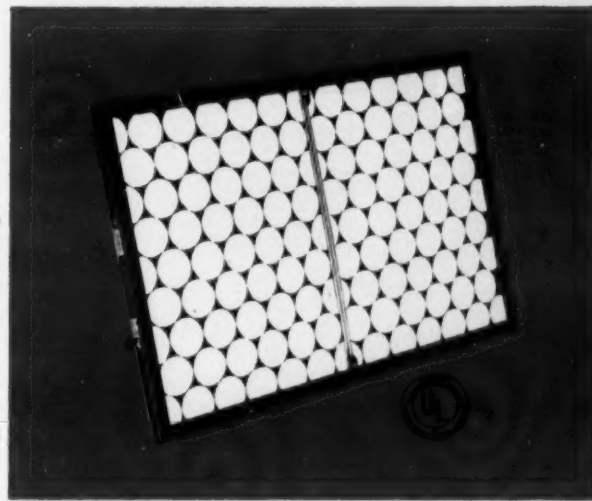
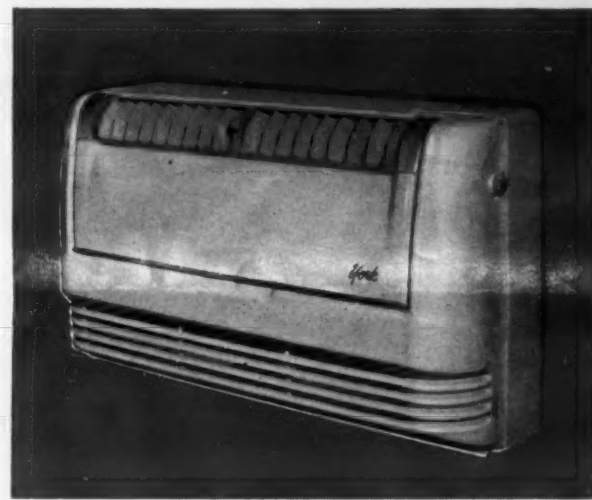
...in PERFORMANCE
...in REPUTATION
...in AVAILABILITY

York chose
AMER-glas
AIR CONDITIONING
FILTERS



LET AAF QUALITY PUT YOU AHEAD

Two important advantages: (1) reputable AMER-glas quality, and (2) custom-engineering to give you top filter performance—are yours when you deal with AAF filter experts. Send for FREE test filter—today!



Air filters that satisfied not just one, but *all* the requirements above were the only kind for York Room Air Conditioners. Naturally, it took a major producer of air filters to do business with York. York engineers had to be pleased . . . volume production schedules had to be met . . . and assurance made that when needed, replacement AMER-glas FILTERS would be available to York users at the consumer level, *country-wide*.

The two manufacturers collaborated successfully, and all filter problems were carefully worked out. Today, look inside the new models of York Room Air Conditioners—you'll see the custom-designed, hospital-white AMER-glas FILTERS.

Why not avail yourself of the more than 30 years' experience and the vast manufacturing resources of American Air Filter? Inquire today—there's no obligation!

usAIRco
30 YEARS OF AIR CONDITIONING

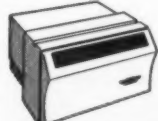
a complete "packaged"
refrigerated air conditioning
line



Packaged Air Conditioners 2 to 15 h.p.



Home Unit 2 to 10 h.p.



Fiberglass Window Units ½, ¾, 1 h.p.

Packaged Central Station Air Conditioners 3 to 60 h.p.

UNITED STATES
AIR CONDITIONING
CORPORATION
MINNEAPOLIS 14, MINNESOTA

For dealer plan write Dept.
ACRN74



AMERICAN AIR FILTER COMPANY, INC.
109 Central Avenue, Louisville 8, Ky.



Trade Mark registered U. S. Patent Office; Est. 1926.

F. M. COCKRELL, Founder

The Conscience of the Industry'

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VOL. 72, No. 11, SERIAL NO. 1,321
 JULY 12, 1954

There's Good News Tonight, Tomorrow, and Next Year

Looking for an aspirin for your business headache? Now hear this:

According to the National Conference of Sales Executives: "America's economic state of health is excellent. We have passed the crisis state of the so-called recession, and are moving ahead to better and increased business activity."

Such talk cheers the ears of sales executives. They heard a lot of it in their recent convention in Chicago.

Both amongst themselves, and from speakers on the rostrum, they gathered evidence that sales of most things America produces are going to be SATISFACTORY for the rest of the year—and next year, too.

Undersecretary of Commerce Walter Williams declared to the NSE:

"No one can forecast events, but on balance, there would seem to be strong reasons for feeling that a good solid bottom is being laid for a renewed rise in business activity."

To substantiate this prediction he pointed toward a stabilized industrial production index, firm or slightly rising prices, personal income minutely below last year, construction activity up, new plant and equipment expenditures exceptionally high, and continued exceptionally strong personal savings.

Balancing this government man's outlook, Ben H. Wooten, president of the First National Bank of Dallas dropped the following "strong economy" factors into the brew of our future economic outlook.

(1) A defense program that will remain between \$40 and \$50 billions for a long time to come.

They'll Do It Every Time . . . Jimmy Hatlo



(2) A philosophy of government in both parties which will not tolerate a depression.

(3) A different attitude toward "give-away political economy."

Individual sales executives at this conference bolstered that appraisal of the statistical indices with their own experiences. They "whomped up" each other with case histories in their own particular businesses—which already are ahead of last year's levels (or, at worst, only slightly behind).

Taking a crack at the "prophets of doom," Robert A. Whitney, president of the National Sales Executives Association, trumpeted:

"The most heralded recession in history, that of 1953, has turned out to be the biggest false alarm in history. The prophets of doom and disaster told us that we were heading for a depression. As usual, they were wrong. In fact, since 1947 we've checked these so-called experts and found they've been 82% wrong."

Grandly, the energetic mood of these sales executives went so far that they even cast doubts on their own previous assessment of SAD SACK present-day salesmen.

After preaching lugubriously that today's salesmen don't know how to sell, the NSE applauded Claude Doyle, sales and advertising manager of the Ford Motor Co., who averred:

"You know, salesmen haven't done so badly after all—or we couldn't have moved goods in such massive quantities."



General Electric Co.
 Small Appliance Div.
 Bridgeport, Conn.

sales talks of George F. Taubeneck,
 of whom we have all the books
 which he wrote.

BIENVENICO R. CURZ

Editor:

We, as manufacturers, have been aware and are more aware than ever, of the great importance of the editorial press to our business, and indeed, to all business.

We are convinced that in these times when uncertainty seems to prevail in the fields of business and economics the importance of the editorial press is magnified. The creation of markets is by no means the function of advertising and merchandising alone. One of the greatest assets to any sales effort is the support that the editorial press alone can give to our modern products and services.

We heartily thank you for the support you have already given to us and all manufacturers. We want you to know the significant value we attribute to this support and to the importance of its continuation.

W. H. SAHLOFF,
 General Manager

Independent Appliance &
 Television Co.
 Habana, Cuba

Editor:

You may believe me that your articles on the latest advancement in the science of refrigeration and air conditioning are of extraordinary benefit to your subscribers.

We have learned a great deal from the articles of the brilliant

Consolidated Refr. Corp.
 Rego Park, L. I., N. Y.

Editor:

Frozen food companies cannot give away or loan equipment, as the markup on frozen foods is not as high, or out-of-line as the prices of milk items. Would not the prices of milk items come down in price to the dealer and consumer, if the milk companies did not lay out so much in equipment?

Are you interested in this argument, or would mention of that condition alone hurt your space sales from refrigeration manufacturers?

J. L. BOOTH

Horseheads, N. Y.

Editor:

I have read every word of your latest book, *Peace and Progress*. You have put into very interesting and exciting reading the feeling Tom and I have had about our way of life.

You have courage to write some of the things you did, but we need such words of wisdom. Wouldn't it be wonderful if every high school library in the country had a copy of your book and it was a requirement for reading before high school graduation?

MRS. THOMAS P. LYNCH

more in '54

PACKAGED AIR CONDITIONERS

GOOD THINGS come in these large "packages"

There are several good things you'll like about the new line of Brunner "packaged" Air Conditioners. One thing, of course, is the full range of sizes and models which permit wide freedom in application planning. The simplicity of installation is welcomed, too — plenty of savings there.

And — another good thing about all Brunner Air Conditioners is the famous Brunner slow-speed condensing unit that means longer service life, less maintenance, lower operating costs — greater satisfaction all around for you — and your customers. In sizes up to 20 H.P., these Brunner packaged conditioners are engineered for dependability and trouble-free performance.

See these outstanding Brunner Air Conditioners . . . see all the "good things" in this great packaged line for 1954 . . .

BRUNNER MANUFACTURING CO., Dept. A-724, UTICA, N.Y.
 The Brunner Co., Gainesville, Ga.
 In Canada: Brunner Corp. (Canada) Limited, Toronto, Ontario



NEW BRUNNER AIR CONDITIONERS

— in a variety of models for within-room or duct installation, are available in 2, 3, 5, 7½, 10, 15 and 20 H.P. sizes. Completely self-contained, easy to install, easy to service.



BRUNNER
 SINCE 1906

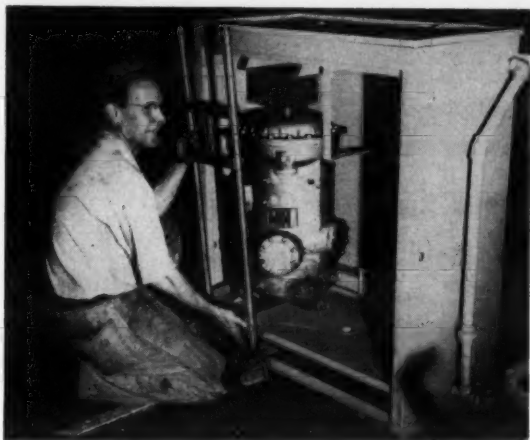
means
 more in '54

BRUNNER AIR CONDITIONING IS ADVERTISED IN THE SATURDAY EVENING POST

Service & Supplies

Hand Truck Saves Manpower

CHARLES HUBER, a refrigeration mechanic at the Pearl Harbor Naval Shipyard, shows off the cart he invented to remove the Chrysler Airtemp compressors from packaged air conditioners and refrigerator units. The small hand truck, 20 in. wide, 43 in. high, and weighing about 33 lbs., will lift over 400 lbs. safely, and easily.



C. A. Patterson Appointed By Spencer Thermostat

ATTLEBORO, Mass. — C. A. Patterson was recently named field engineer in the Philadelphia area for Spencer Thermostat Div. of Metals & Controls Corp. here, according to Jerome Ottmar, vice president. Patterson is a graduate in electrical engineering from M.I.T. He joined Spencer Thermostat in 1946 and served as field engineer in the St. Louis area until 1952, when he was recalled for two years of active Naval service.

In Philadelphia he will replace R. M. Glidden, who is transferring back to the factory to manage advertising and sales promotion activities for Spencer Thermostat and General Plate divisions of Metals & Controls Corp.



C. A. Patterson

Marsh Names Harry Kirby To Head Cleveland Office

SKOKIE, Ill. — Harry Kirby has been named by Marsh Instrument Co. to head its Cleveland office.

Kirby will represent Marsh in the sale of gauges, thermometers, needle valves, and will direct his sales efforts toward the manufacturers of original equipment.

Territory to be covered by Kirby will include portions of Pennsylvania and New York in addition to all of northern Ohio.

This territory was previously handled by A. C. DuPerow who is now retired.

Kirby joined the Marsh sales staff in 1946 and has worked in various territories throughout the middle west.



Harry Kirby

Refrigeration Equipment, Parts Wholesalers' Sales Up 12%

WASHINGTON, D. C. — Commercial equipment and parts wholesalers and electrical appliance and specialty wholesalers recorded exactly opposite sales results for the first four months of this year, according to a Census Bureau report.

Refrigeration equipment and parts wholesalers' sales in that period were 12% ahead of the corresponding year-ago period. But those of wholesalers of appliances and specialties dropped 12%.

April sales of refrigeration equipment and parts wholesalers were up 18% from both the preceding month and a year ago. Sales of appliance and specialty wholesalers, however, declined 9% compared with the like 1953 month and were off 7% from March.

Sales in April of all merchant wholesalers (as a group) reporting to the Census Bureau dropped 5% below the previous month and were also down 5% from a year ago. Cumulative sales for the first four months were 4% under the corresponding period of last year.

Of the 37 kinds of business covered in the bureau's April wholesale trade report, 24 indicated sales below the previous month.

"In comparison with April sales a year ago," the agency noted, "most trades reflected declines. Of the seven kinds of business showing gains over April 1953, commercial refrigeration equipment

Kind of Business and Geographic Division	Per Cent Change		April 1954 Panel	
	—April 1954—		No. of Firms Reporting	
	Apr. 1953	Mar. 1954	1953	1954
Refrigeration equipment, parts (com'l)	+18	+18	73	2,589
Middle Atlantic	+13	+13	14	824
East North Central	+14	+14	14	233
South Atlantic	+20	+26	25	762
Pacific	+65	+4	9	237
Appliances and specialties wholesalers	-9	-7	112	18,588
New England	-8	-14	14	1,720
Middle Atlantic	-14	-5	23	6,099
East North Central	+9	-6	18	2,537
West North Central	-2	-16	3	2,229
South Atlantic	-8	+3	11	1,760
South Central	-24	-4	10	1,046
Mountain	-22	-5	9	1,563
Pacific	-2	-4	10	1,634

Inventory, End-Of-Month (At Cost)

Kind of Business and Geographic Division	Per Cent Change		April 1954 Panel	
	—April 1954—		No. of Firms Reporting	
	Apr. 1953	Mar. 1954	1953	1954
Refrigeration equipment, parts (com'l)	+7	+6	63	4,374
Middle Atlantic	-12	+3	11	998
East North Central	+2	-4	11	488
South Atlantic	+18	+8	25	1,789
Pacific	+11	+6	7	278
Appliances and specialties wholesalers	-11	+1	91	23,031
New England	-1	+18	12	2,224
Middle Atlantic	0	-5	16	5,098
East North Central	+11	+6	13	3,593
West North Central	-14	-1	10	2,133
South Atlantic	-3	+3	16	3,214
South Central	-19	+7	8	2,381
Mountain	-36	-5	8	2,061
Pacific	-31	-4	8	2,327

and parts wholesalers (up 18%) and farm supplies dealers (up 21%) made principal gains."

End-of-April inventories of refrigeration equipment and parts wholesalers increased 7% compared with a year ago and were up 6% from March 31. Those of ap-

pliance and specialty wholesalers were 11% less than on April 30, 1953, and 1% above March.

Inventories of all reporting wholesalers as a group at the end of April showed no change during the month but were down 4% from stocks April 30, 1953.

Brand NEW



EVAPORATOR PRESSURE REGULATOR VALVE

Positively prevents freezing of water cooling equipment and frosting of air coils

Model 238
1-ton Capacity,
Freon 12



Here's one more A-P "first"!

One more opportunity to design greater performance into your product with world-famous A-P dependable products. Job-proved features like these add application flexibility never before available!



The Model 238 is IMMEDIATELY available — see your refrigeration wholesaler, or write:

A-P CONTROLS CORPORATION

2460 N. 32nd Street, Milwaukee 45, Wisconsin
In Canada: A-P Controls Corp., Ltd., Cookville, Ontario
For Export: 13 E. 40th St., New York, N. Y. U.S.A.



DEPENDABLE Controls

for Air • Liquids • Gases • Refrigerants

It was time
for a better
Solenoid Valve



The day Jas. P. Marsh Corporation acquired the Electrimatic line of regulators and control valves was the beginning of higher quality construction and greater dependability in products of this type.

Today Marsh-Electrimatic products are setting their own standards. An excellent example of this is the new 60, 65 and 67 Series of Marsh-Electrimatic Valves. Notice, for instance, the bodies machined from solid bar brass stock which means greatly added strength safeguarding against distortion when installing. And the machined bodies are simply outward evidence of the quality and precision found in every detail: Moisture and frost proof coils, specially impregnated and liberally wound; remarkably tight seating valves with both seat and needle non-magnetic to prevent accumulations that often prevent proper seating in valves not so constructed.

All of the 60, 65 and 67 series are Underwriters' approved and rated. Note the range of these valves briefly covered opposite. Ask for complete details.

MARSH INSTRUMENT CO.
Sales affiliate of Jas. P. Marsh Corporation
Dept. D, Skokie, Ill.

MARSH-Electrimatic



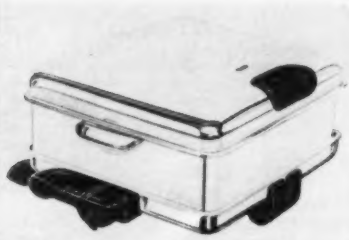
Marsh Electrimatic 60 Series valves are direct acting with 3/16" orifice; maximum pressure 150 psi. The 65 and 67 Series are pilot operated; maximum pressure, 200 psi. 65 Series has 3/8" orifice; 67 Series, 1/2" orifice for large capacity requirements. All Series have 1/2" conduit leads 24" long.

★ The Marsh-built family of Electrimatic Controls also includes water regulators in a full range of types. Ask for facts.

What's New

When requesting further information on new products, please use "Information Center" form.

'Lectric Cook-All' Provides Controlled Temperature



KEY NO. D-721

COLUMBUS, Ind.—Designed to make full use of the many advantages of controlled temperature cooking, a "Lectric Cook-All" will be introduced at the National Housewares Show in Atlantic City July 12 by Arvin Industries, Inc. here, the company has announced. The Lectric Cook-All, which will be a companion piece to the company's "Lectric Cook," may be used as an electric frying pan, roaster, oven, chafing dish, sauce pan, defroster, or food warmer, Arvin claims.

A highly sensitive thermostat that enables the user to "tune in" any desired degree of heat between 150 and 500° F. has been engineered into the appliance. An auto-

matic signal light flashes on when the unit is plugged in and goes off as soon as the preset temperature has been reached.

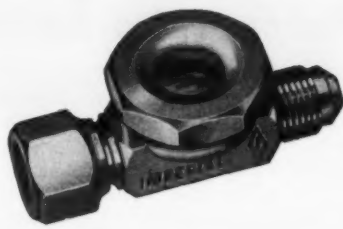
The Lectric Cook-All is basically the Lectric Cook to which has been added a removable aluminum insert pan 9 in. sq. and 3 in. deep. The pan provides 243 cu. in., or over 4 qts., capacity.

A heavy-duty, wide range expansion hinge provides a snug fit between cover and pan and permits raising the lid vertically or opening it out flat like a book.

Weighing only 10 lbs., the Cook-All can be carried about easily. The aluminum insert pan can be lifted from the Cook-All and cleaned in the dishpan. Additional insert pans will be available at nominal cost.

Closed, the Cook-All is 12 in. sq. and 6½ in. high. It operates on 110/120 volts a.c. and draws 1,320 watts. Shipping weight is 11 lbs.

Production is expected to begin on the appliance about July 19. Recommended retail price is \$29.95. The Lectric Cook will continue at its present \$28.50 retail price.



Imperial Liquid Indicator 'Spells Out the Answer'

KEY NO. D-722

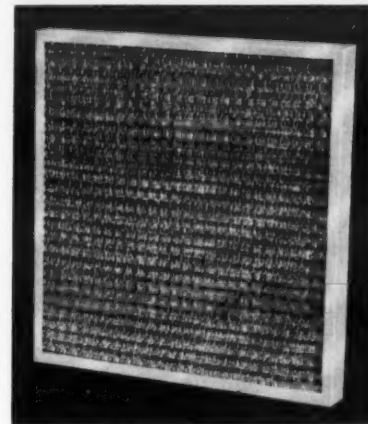
CHICAGO—A new "Magic-Eye" liquid indicator in which the word "Full" actually appears when the system is fully charged, has been announced by The Imperial Brass Mfg. Co. here.

The word "Full" disappears when there is an insufficient amount of refrigerant.

"A new type of crystal insert is utilized to provide this positive reading method which is stated to assure against errors and guesswork," the company said.

"The new unit is of basic, time proven design that has proved itself leakproof and trouble free over years of service. It has a husky forged brass body which cannot be distorted in assembly. Heavy glass on port hole has positive seal."

The new liquid indicator is offered in two styles—female flare swivel to male pipe thread and flare to flare in sizes from ¼-in. to ½-in. o.d.



Evans Air Filter Claims To Hold 200% More Dust

KEY NO. D-723

MOLINE, Ill.—An all aluminum lifetime air filter for commercial, industrial, or residential heating and cooling systems has been introduced by the George Evans Corp. here.

This new filter is claimed to hold up to 200% more dust than competitive filters with less than half the peak resistance to air flow.

This is possible, the company says, because precision angled openings set up a higher turbulence within the filter and cause the air to travel over 3.5 times the width of the filter from the inlet to the outlet side.

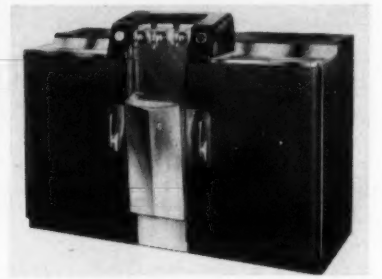
The filter pack is exactly machine stamped to have rough, talonlike burred edges which grip and hold the dirt. Air is forced to travel over 1.24 miles of these edges in a 20 by 20 by 2-in. size filter.

These precision machine openings and corrugations form what the Evans Corp. calls air scoops in the filter pack. The filter pack is made with large openings on the inlet side and progressively smaller openings on the outlet side.

This design, the company says, makes it possible to hold the lint at the same time as the progressively smaller openings permit dirt to penetrate deep into the

pack instead of matting on the intake face. Evans claims that this allows the filters to function efficiently for almost three times as long.

In areas where there is corrosive action in the air, the filters may be anodized to give them protection against corrosion.



'Uni-Bar' Has Temperature Control for Keg Cooling

KEY NO. D-724

ERIE, Pa.—Temperature adjustment to cool warm kegs fast or keep cool kegs at desired temperature is a feature of the new "Uni-Bar" introduced recently by Uniflow Mfg. Co. here.

The Uni-Bar 2DP will cool and dispense two half-barrels of beer and cool a third half-barrel so that it will be at serving temperature when needed, the company said.

The Uni-Bar features stainless steel in hard usage areas, three floor drains, a drain in each glass tray, a dispenser drain, and a sink drain. Overlap door construction with non-conducting breaker strips are other features.

Uni-Bars are available in baked-on "tavern brown" or stainless steel for either remote or self-contained (including hermetically sealed refrigeration unit and filtered air pressure system) installation. They come with or without bartop (except models for keg storage only) and with or without bottle storage and cooling section.

Low initial cost, low operating cost, and easy installation are claimed.

1 of the many reasons why you will find it pays to sell Chrysler Airtemp

A 5-year Compressor Warranty that means more

TO YOU AND TO YOUR CUSTOMERS!

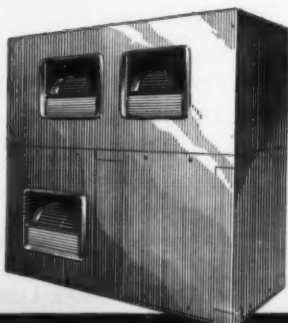
● Pioneer of "Packaged" Air Conditioning, Chrysler Airtemp was also the originator of the 5-Year Warranty on compressors in "Packaged" units. Later, Chrysler Airtemp was the first to take the 5-Year Warranty out of the "optional" class, making its Warranty applicable on all "Packaged" Air Conditioners shipped from its factory. And today, there are important features of the Chrysler Airtemp 5-Year Compressor Warranty which make it mean more—to you and to your customers.

The 5-Year Warranty which now backs every Chrysler Airtemp "Packaged" Air Conditioner sold not only covers replacement of the compressor. It includes, also, payment of freight and labor.

It's a comprehensive warranty—one that gives you and your customers a clean deal. And the assurance of satisfaction which it allows you to pass on to your prospects constitutes another good reason why you will find it easier to sell the "Packaged" Air Conditioning which most people buy—Chrysler Airtemp. Stop now to review additional reasons listed below—then mail coupon for complete details.

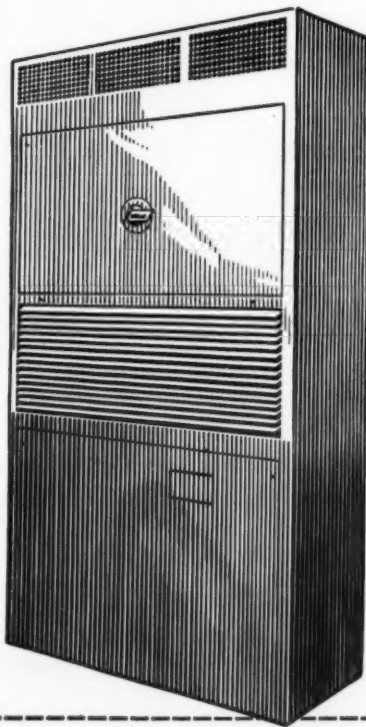
7 more advantages you sell with when you sell Chrysler Airtemp...

- **Consumer Confidence**—people know the Chrysler Airtemp name—associate it with engineering leadership—have confidence in the products which carry it.
- **Lower Installation Cost**—super-quiet operation permits use within or very close to areas to be cooled, reducing amount of ductwork required. All units shipped completely factory-assembled and tested.
- **Assured Dependability**—Chrysler Airtemp pioneered "Packaged" Air Conditioning in 1937, has more units in use today than anybody else. All units are manufactured to exacting standards of precision in a modern, windowless, completely air conditioned factory.
- **Advanced Engineering** by Chrysler Airtemp offers your customers features that mean more because they do more for them.
- **More Complete Line**—9 models meet all requirements.
- **More National Advertising**—6 big campaigns reaching all prospects for air conditioning; 22 campaigns in trade journals constantly selling the particular benefits of Chrysler Airtemp "Packaged" Air Conditioning to individual businesses and professions which make up your most important markets.
- **More Local Selling Help**—the broadest line of tested and proved local selling helps for dealers.



"Packaged" Air-Cooled Air Conditioners—no water needed, no plumbing required. 2, 3 and 5 H.P.

"Packaged" Air Conditioners in 6 water-cooled models, from 2 to 15 H.P.



CHRYSLER AIRTEMP

heating • air conditioning for homes, business, industry

Airtemp Division, Chrysler Corporation, Dayton 1, Ohio

Airtemp Division of Chrysler Corporation
P.O. Box 1037, Dayton 1, Ohio

AC&RN-8-54

I would like to know more about the Chrysler Airtemp Franchise.

Name _____

Address _____

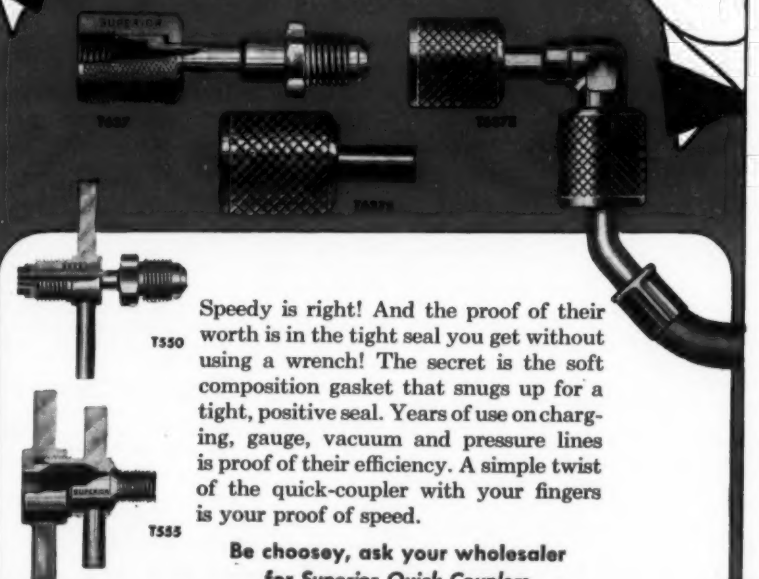
City _____

Zone _____

State _____

Like these Quick-Couplers?

Man, they're speedy



Speedy is right! And the proof of their worth is in the tight seal you get without using a wrench! The secret is the soft composition gasket that snugs up for a tight, positive seal. Years of use on charging, gauge, vacuum and pressure lines is proof of their efficiency. A simple twist of the quick-coupler with your fingers is your proof of speed.

Be choosy, ask your wholesaler for Superior Quick-Couplers

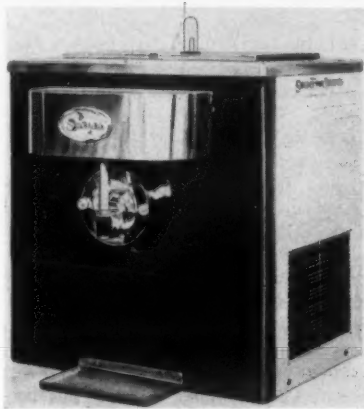
Superior valve and fittings co.

Pittsburgh 26, Pa.



What's New (Con't)

New Control System Simplifies Freezer Operation



KEY NO. D-726

SEATTLE—Removal of all switches from the front panel and the development of a new control system that greatly simplifies operation marked an improved version of an air-cooled table model soft ice cream freezer introduced recently by the Sweden Freezer Mfg. Co. here.

Elimination of the switches on the front gives the model 1-169A3 freezer a more attractive appearance and makes the cleaning operation much easier, the company claims.

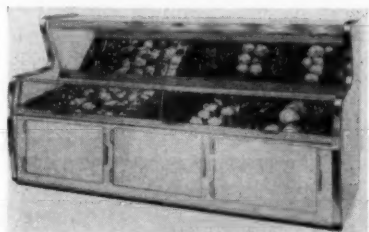
The few necessary controls have been housed in a small, removable box that plugs in like a radio tube and is located under an easily removed cover. They are out of the way of the operator who does not need to touch them during the day.

Actual operation of the freezer, the company said, is done by an electrically operated foot switch which opens the serving gate and also controls the feeding of fresh mix into the cylinder to replace the product drawn. This system of control leaves the operator's hands free to make up to four servings at a time, the manufacturer added.

A new electronic portion control unit just developed by the company is available as an accessory on all automatic continuous Sweden freezers. Operating through a foot switch, this control permits the operator to dispense two different sized servings by stepping on different ends of the foot switch.

The size portions desired are preset by the owner or his manager and are not under the control of the operator.

Schmidt Introduces 2 Self-Serve Meat, Vegetable Cases



KEY NO. D-727

CINCINNATI—The C. Schmidt Co. here has introduced two self-service cases for meats and vegetables which have 15 cu. ft. for display and 32 cu. ft. for storage

while occupying only 33 1/2 sq. ft. of floor space.

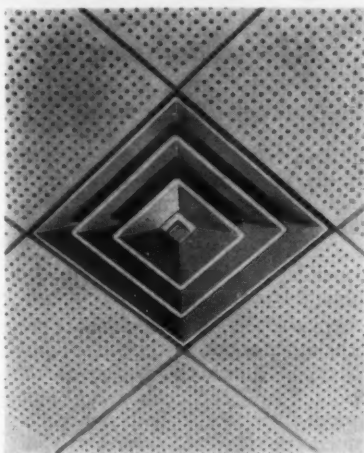
Exterior finish is porcelain enamel with stainless steel trim.

Large doors provide easy access to the storage compartment while rollers in door sills simplify the handling of heavy crates.

Standard length is 10 ft., but more than one case can be joined together for continuous display.

Model OMS-10A, with mirror, is available with sliding mirror for rear service. Model OMR-10A is built with storage doors in the front or the rear.

New Line of Square Diffusers Announced by Universal



KEY NO. D-728

NEW YORK CITY—A new line of adjustable square air diffusers with built-in equalizing deflectors and rectangular air diffusers for two, three, or four-way diffusion has been announced by Universal Diffuser Corp. here.

The "Type 'H' Flexiflo" square series is manufactured in styles for plaster or acoustical tile ceiling installations. The easily adjustable vanes increase or decrease volume as desired without auxiliary dampers and can be locked into place, the company pointed out.

"This adjustment of the diffuser only changes the volume; pattern of diffusion remains constant," it

was stated. "This feature makes balancing an air distribution system a simple matter and facilitates air volume changes 'on the job.'"

Six models are available ranging in size from 4-in. to 16-in. neck diameter.

The "Type 'MP' Multi-Pattern" rectangular series uses the same blade form as the square model, with no "blank-off," and is designed for use in areas of irregular shape.

All sizes and designs are available including long strip units up to 72 in. in length.

Special selection charts, based on neck areas, have been developed to simplify sizing.

Portable Smokehouse Is Completely Automatic

KEY NO. D-729

KANSAS CITY, Mo.—A portable smokehouse that is completely automatic in operation has been announced by Koch Supplies located here.

Both electric and gas models of the "Grand-Prize" smokehouse are available. Temperature is regulated by a thermostat and smoke density is controlled by an electric sawdust feeding device, the company said.

Low design of the smokehouse



facilitates loading as even the top row of smoke stick supports is only 6 ft. 3 in. above the floor, Koch declared. Capacity is 500 lbs. at a charge.

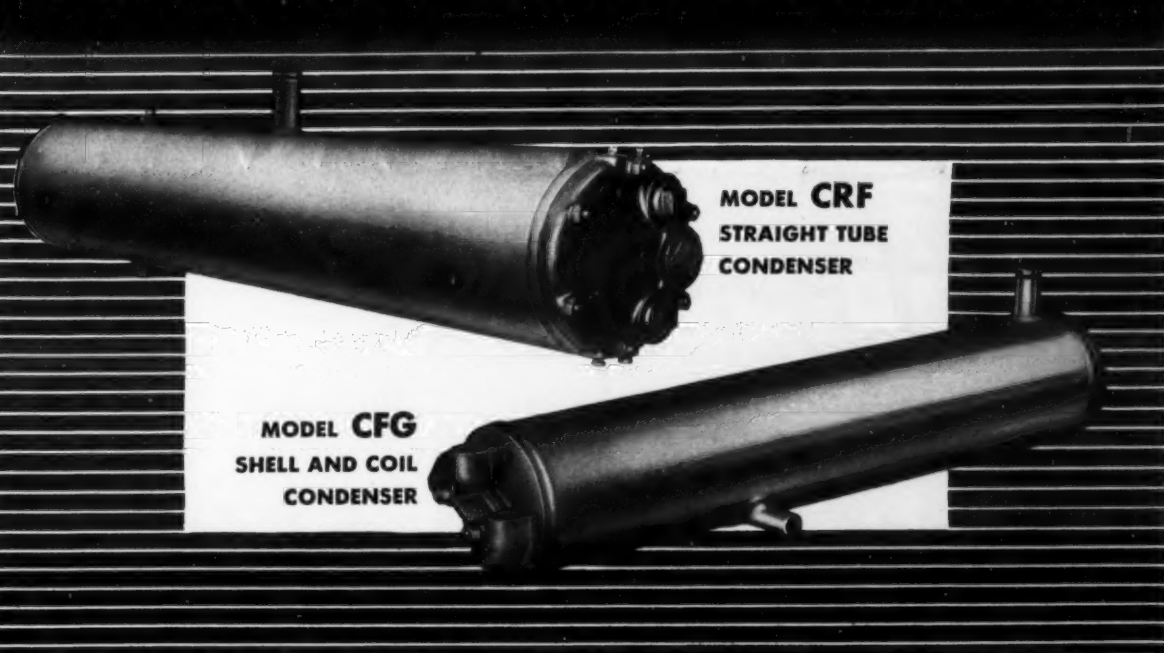
The entire cabinet and door are fully insulated. The inner walls are galvanized. Protective grilles over the heating elements catch any product that might fall, thereby eliminating the danger of fire, the manufacturer said.

Smoke is generated automatically in a separate cabinet on one side of the house. A Koch automatic sawdust feeder delivers sawdust from a hopper at a uniform rate. The Grand-Prize can be operated with heat only, with smoke only, or with both together.

USE THE COUPON!

For "easy-to-get" product information . . . use coupon in the "Information Center" form.

TWO NEW STOCK CONDENSERS



FOR REPLACEMENT WORK OR ORIGINAL EQUIPMENT IN SMALLER TONNAGE INSTALLATIONS

B & G quality in two moderately priced refrigeration condensers! Both are built in popular sizes which enable wholesalers to maintain representative stocks—ready for immediate shipment. Both are excellent units for replacement work or as original equipment for installations within their capacity range.

Model CRF is an extended surface, straight tube unit, with removable head for easy cleaning. It is constructed, tested and stamped in accordance with ASME Unfired Pressure Vessel Code.

Model CFG is a shell and coil condenser, with extended surface for rapid transfer of heat. Correct designing and sturdy construction assure efficient, dependable service. These units are built to ASME Code requirements and labeled "UM."

For complete data, send for bulletin FU-1153.

SELECTION DATA, MODEL CRF

125 lb. working pressure tube side (water); 300 lb. shell side (refrigerant)

Model Number	RATING—TONS REFRIGERATION		Water Pressure Drop—PSI	No. of Tubes	No. of Tube Passes	Condensing Surface—Sq. Ft.	Pump Down Capacity—GPM
	Water Tons	Refrigerant Tons					
CRF-2	2.2	5	2.1	12	4-8	17.1	28.8
CRF-3	3.7	1	3.5	24	4-8	31.7	53.2
CRF-5	5.75	2.5	5.4	24	4-8	43.8	71.8
CRF-7.5	8.5	3	8	24	4-8	65	99
CRF-10	12.8	6	12	36	4-8	83	146
CRF-15	17	6	16	48	4-8	116	131
CRF-20	22	8	21	48	4-8	141	129.5
CRF-25	29	11	28	54	4-8	178	146

NOTE ① Based on water in at 75° F. out at 95° F. (1.5 GPM/ton), 102° F. condensing temperature and 40° F. suction temperature—maximum number of head passes.

NOTE ② Based on water in at 85° F. out at 95° F. (3 GPM/ton), 105° F. condensing temperature and 40° F. suction temperature—minimum number of head passes.

NOTE ③ Pump down capacity based on 80% of total volume and From 12 at 102° F.

SELECTION DATA, MODEL CFG

150 lb. working pressure tube side (water); 300 lb. shell side (refrigerant)

Model Number	RATING—TONS REFRIGERATION		Water Pressure Drop—PSI	No. of Tubes	No. of Tube Passes	Condensing Surface—Sq. Ft.	Pump Down Capacity—GPM
	Water Tons	Refrigerant Tons					
CFG-2	2.1	2.5	2.4	7	3	19	19
CFG-3	3.15	2	3.3	9	3	30	30
CFG-5	5.2	2	5.4	11	3	35	35
CFG-7.5	7.85	2.5	8.1	11	3	50	50
CFG-10	10.5	2	11	11	3	73	73

NOTE ① Based on water in at 75° F. out at 95° F. (1.5 GPM/ton), 102° F. condensing temperature and 40° F. suction temperature.

NOTE ② Based on water in at 85° F. out at 95° F. (3 GPM/ton), 105° F. condensing temperature and 40° F. suction temperature.

NOTE ③ Pump down capacity based on 80% of total volume and From 12 at 102° F.

Information Center

For more information on What's New products, current literature and catalogs available, equipment advertised in AIR CONDITIONING & REFRIGERATION NEWS use Key Numbers where designated or specify products advertised and we'll see that you receive this information promptly.

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Commercial Refrigeration

Portland Foodliner To Exemplify IGA Ideas To Make Small Independent Store Competitive

CHICAGO—The Portland Foodliner, an independent food market that is expected to open for business in Portland, Me. about Labor Day, was cited here recently as typical of what the Independent Grocers Alliance is aiming at for its members.

The 5,040-sq. ft. store, which will incorporate year-round air conditioning and 163½ ft. of refrigerated display cases, was described for IGA store engineers attending a clinic here by Everett Curtis of Milliken Tomlin Co., Portland food wholesaler.

Curtis said that the store is expected to do a \$10,800 weekly volume and will carry an initial stock in excess of \$20,000.

Curtis, who is retaining title to the building, said that he is spending \$13,000 for a 15-ton Trane heating and cooling system with a 15-ton Acme water tower. Cost of the refrigeration fixtures will be \$28,000.

To be installed in the market are 24½ ft. of open dairy cases, 25 ft. of self-service meat cases, 32½ ft. of fish and service meat cases, 36½ ft. of fruit and vegetable cases, 12½ ft. of ice cream cases, and 32½ ft. of frozen food cases.

In the basement will be a 10 by 18-ft. meat cooler, 8 by 12-ft. produce cooler, and 6 by 8-ft. frozen foods walk-in. The Copeland compressors serving this equipment will be in turn served by a 10½-ton Acme water tower. Both towers are also located in the basement.

Curtis said that the Fells Co. got the air conditioning contract, A. F. Briggs Co. got the refrigeration contract, and the Brown Construction Co. is the general contractor. All are Portland firms.

An outstanding feature of the new market will be the arrangement of the dry food islands at 60° angles to the store.

Good Housekeeping In Back Room

IGA Engineers Hear Formulas for Apportioning Refrigerated Space; What Can Be Done to Improve Efficiency

CHICAGO — Good housekeeping in the back room adds up to efficiency in every department in the food store, store engineers attending a recent clinic here of the Independent Grocers Alliance of America were informed.

Wayne Clemens, assistant general sales manager, retail accounts division, Hussmann Refrigeration, Inc., gave the engineers some rough formulas to help figure how much refrigerated storage space would be needed, and Dave Nance of the Gary Wholesale Co., Gary, Ind., reported on the results of a survey to find out what improvements could be made in back room arrangement.

Clemens noted that 20 to 25% of the store building area should be devoted to the back room. About 60% of this is taken up by dry grocery storage.

For the storage of meat, Clemens said, the engineer should figure on 1 sq. ft. of cooler floor area for every \$50 of meat retail sales per week. A cutting cooler should be immediately adjacent to the meat storage cooler and should be a little larger than the storage cooler in small stores and of equal

The Independent Grocers Alliance of America recently invited store engineers to Chicago for a conference, purpose of which was to outline the latest information on how to increase store profits through modernization.

As much of the information presented at the conference directly concerns the commercial refrigeration distributor and dealer, on whom these store engineers will rely for much of their work and ideas, the News covered the conference.

In a series of reports started in the June 28 issue, and continuing in this and future issues, will be found many new ideas which affect the market for food store equipment.

said, by fencing off the back room into four areas, one each for dry groceries, produce, meats, and dairy. There were two receiving doors in the back wall, so placed that each door served two of these areas. Inside the room adjacent to these doors were swinging gates, separating the two areas served by each door. When deliveries were being made to one area, the gate closed off the second. When deliveries were made to the second area, the gate swung over and closed off the first. In this way, there was no possibility of getting merchandise in the wrong area, Nance noted.

"I know you IGA wholesalers are wondering how to get low cost refrigeration for your retailers," Clemens anticipated. "Well, I'll tell you.

"Refrigeration equipment manufacturers are thinking of refrigeration sales the same way as you wholesalers think in putting food on the grocers' shelves. You want to get them there at the lowest possible cost so that the grocer can realize the greatest possible profit.

"In order to do this, someone must perform many services. We help the grocer to prosper and grow by performing services. First there is store planning and layout to consider. Then the proper equipment needed to do the job the grocer wants must be determined. (Continued on next page)

size in larger stores. Meat packaging can be done in a non-refrigerated room when refrigerated packaging tables are used, he said.

The engineer should figure on 1 sq. ft. of produce cooler for each \$40 of weekly produce sales. For the dairy cooler there should be 1 sq. ft. of cooler area for each \$60 of weekly dairy sales. Freezer storage should equal the capacity of the display space for frozen foods in the merchandising area.

Clemens recommended the use of an upright reach-in freezer for frozen food storage rather than a walk-in in order to save floor space.

Nance predicted that 20 to 25% of total store business would be in frozen foods within the next three to five years.

He said to get his data on what improvements could be made in back room arrangement, he went to the men who should know—the delivery truck drivers.

They suggested that delivery doors be made not less than 4 to 6 ft. wide and either swing out a full 180° or slide up overhead.

They recommended that the receiving door be located on the narrow wall of the back room so that the conveyor would run straight ahead the length of the storage area. If it were laid out this way, they explained, the men removing cartons from the conveyor would be able to stack them without moving away from the conveyor and would thus save steps, save carrying heavy loads, and would speed up the operation.

They also called for the elimination of steps and turns in the storage room.

Nance pointed out that one factor in back room efficiency was to have all the merchandise for one department stacked in the same place and easily accessible.

One store accomplished this, he

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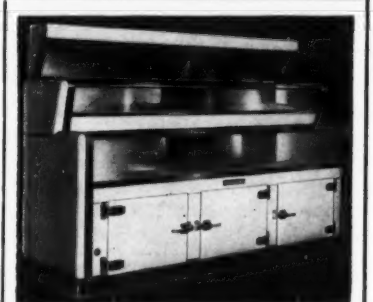
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Self-Service Case

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Pinnacle
EQUIPMENT CORP.
FLEETWOOD, PA.

EXPORT DEPT.: 39 Broadway, New York

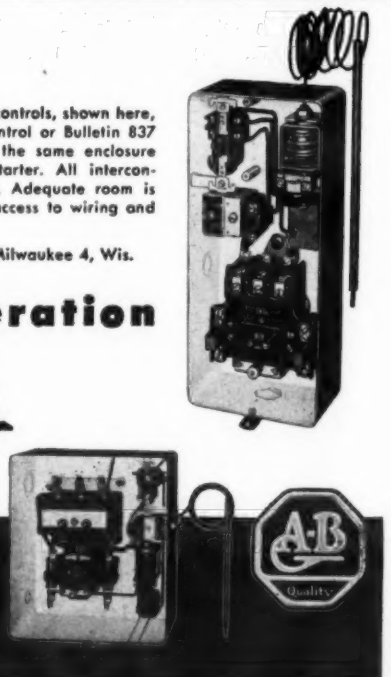
These typical compact combination controls, shown here, consist of the Bulletin 836 pressure control or Bulletin 837 temperature control units mounted in the same enclosure with an A-B Bulletin 709 solenoid starter. All interconnected wiring is made at the factory. Adequate room is provided in such enclosures for easy access to wiring and all adjustments.

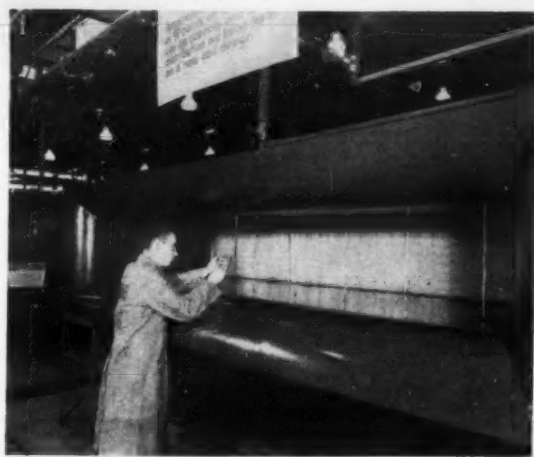
Allen-Bradley Co., 1313 S. First St., Milwaukee 4, Wis.

special refrigeration

control panels

ALLEN-BRADLEY
Quality
MOTOR CONTROL





LEFT: Preparing to test a new coil design in an air tunnel in the Trane Research and Testing Laboratory, a technician adjusts the thermocouples—devices for measuring temperature differences electrically. Indicating the thoroughness of testing in the laboratory, as many as 90 different readings are taken in a single test on this 18-in. by 120-in. coil.

RIGHT: Surrounded by chilled air, a room-within-a-room that helps design and rate Trane convectors was visited by guests during an open house. The walls, floor, and ceiling of the inner room are chilled on the inside to 55° to simulate sub-zero weather. The inside surface of exposed walls of the average house doesn't get as cold as 55° until the outdoor temperature dips to -10° or -20°. The chilled air circulates within a 2-ft. area between the inner and outer rooms. Trane convectors are placed against an inner wall of the inside room and hooked up to steam or hot water pipes.

New Trane Lab Includes Facilities for Testing Equipment at Temperatures from -65° to 2,500°

LA CROSSE, Wis.—A broadened research program looking as far ahead as 10 years into the future is now being mapped by the Trane Co. with dedication of its new Research and Testing Laboratory here, a "House of Weather Magic" that triples the company's experimental and product development facilities.

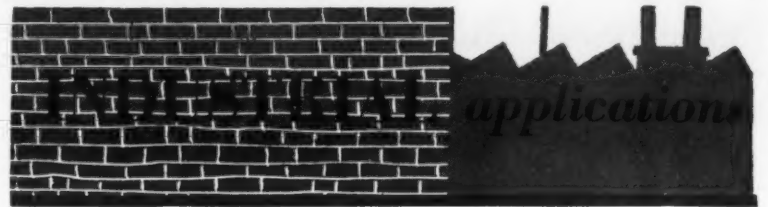
Intensive studies already outlined range from basic flow studies on varying types of coils to correlation of factors affecting condens-

ing and evaporating coefficients of refrigerants, and from coil performance under severe frosting conditions to their performance at extremely high temperatures; and a host of other projects.

Enabling pre-tests of equipment designed for use anywhere from Arctic regions to equator, the laboratory has facilities for duplicating a wide variety of temperature, humidity, pressure, and air movement conditions.

For example, one of its two cold

rooms permits the temperature to be driven down to -65° F. for pre-testing equipment destined for use in Arctic or cold storage conditions. At the other extreme is an atmosphere-controlled furnace where the temperature can be skyrocketed to 2,500° for research in new methods of fabricating heat exchangers designed especially to cope with the ever-climbing temperatures of new industrial processes and perhaps, too, to help in harnessing of atomic energy.



In addition there are such facilities as a room-within-a-room to test heating equipment under simulated winter conditions, a "floating" room for sound tests, and other testing equipment.

Of the two cold rooms in the laboratory, the larger, 28 ft. by 14 ft. by 9½ ft. high, will maintain temperatures down to -25° F. The smaller cold room, 12½ ft. by 6½ ft. by 8½ ft. high will maintain temperatures down to -65° F.

Inspection windows through which technicians can watch equipment under test from outside are of triple thickness Thermopane glass. The -25° F. cold test room walls are of cork and plastic covering, 9 in. thick. The -65° F. cold test room walls are of the same construction, 15 in. thick. The cold room doors are 10 in. thick and filled with cork.

Two-Stage Cascade Refrigeration System

An unusual two-stage cascade refrigeration system using two 50-hp. reciprocating compressors pulls down cold room temperatures. A third 7½-hp. compressor is used for hot-gas defrost of cooling coils for the test rooms. Two sets of coils are installed so one set can be defrosted without interfering with the test currently under way.

The refrigeration system capacity is controlled by a precision temperature controller acting on a back-pressure valve and automatic unloaders on the compressors.

The humidity required for each test is supplied by steam jets directly into the test room ductwork. Steam is taken from main plant boilers.

Instrumentation outside test rooms will indicate and record temperatures, air flow, or pressure drop through coils under test. "Freon" flow through coils and cold test room ambient temperatures. Changes in these factors as frost builds up will be carefully measured for basic data on how frost affects coil performance.

Chilled air supplied by a 10-ton system surrounds all four walls of the room-within-a-room to simulate winter heating conditions for testing and rating convectors.

The cold air circulates between a 2-ft. wide plenum space between

walls of the two rooms. Walls of the smaller room are maintained at about 55° F., or "a good deal colder than the inner surface of walls of a well insulated house when it's -20° F. outside," the company explains. The inner room is 12 ft. by 16 ft. by 8 ft. high.

The inner room, with all four walls surrounded by chilled air, is supported within the outer room by nine steel legs and side braces.

A precision, 16-point electronic indicating and recording thermometer makes a permanent record of temperatures throughout the test room.

Air Tested at Many Levels in Room

To make sure that the convectors distribute warmed air evenly in the room, thermocouples are located to measure the temperature at critical areas. Thermocouples are located above the floor at 3-in., 30-in., and 60-in. levels and 3 in. below the ceiling and just in front of the convector. Temperature of air entering and leaving the heating coil is taken. A permanent record of these temperatures over several days may be made by the recording and indicating thermometer.

To measure B.t.u. used by the
(Concluded on next page)

MUELLER BRASS CO.

deluxe drier... the one that covers all bases

THE ONE PROVED BY 3,000,000 IN SERVICE

Three million Mueller Brass Co. Deluxe Driers have been installed in commercial refrigeration systems. The completely satisfactory service they have given wherever they have been used is certain proof of the thoroughly effective cleaning and drying job they do.

THE ONE WITH THE EXCLUSIVE CONE SCREEN FILTER

The cone screen filter of Mueller Brass Co. Deluxe Driers is a patented filter-strainer unit filled with chemically cleaned pure wool. And the filter area has been increased 30%, providing a cleaning capacity approximately seven times that of the usual disc.



THE ONE THAT REALLY REMOVES MOISTURE AND ACIDS

... AND ALWAYS HAS! PA 400 Super Silica Gel, a new, more effective desiccant in Mueller Brass Co. Deluxe Driers, provides up to 98% more drying capacity. In addition, PA 400 not only removes moisture that may cause formation of acids in a system but also removes these acids if they are already present prior to the installation of the drier.

THE HOME OF MUELLER BRASS CO. DELUXE DRIERS... the large, modern plant in Port Huron, Michigan. Mueller Brass Co. was one of the pioneers in the development of reliable refrigeration and air conditioning equipment. Complete laboratory, research and manufacturing facilities insure the production of valves, driers, fittings and copper tube bends and coils to the highest standards of quality.

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Wrot Copper Fittings and Copper Tube

Flare Fittings

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MERIAM FILTER PRESSURE GAUGES

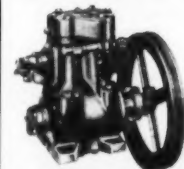


Direct reading, accurate, non-spilling for indicating low air pressures. Designed for use as a portable unit, or permanent installation. Model C-4128 0"-3" water pressure. Model C-4490 0"-6" water pressure.

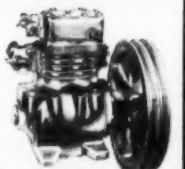
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Model H (¾ hp)
Price: \$30.00



Model F (1 hp)
Price: \$33.00

REFRIGERATION DEALERS!

(Specification sheet available on request)

Buy these Kelvinator bodies while they still last. Originally intended for manufacturing ¾ and 1 hp condensing units. Now, a change in plans brings you these brand-new bodies—complete with flywheel and service valve—at just a fraction of the regular price.

Order direct from

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New York 3, N. Y.

GRamercy 3-8000

New Trane Testing Laboratory--

(Concluded from preceding page)

convector on test, condensate is weighed if steam is being used, or the hot water is weighed if it's a hot water heating test. These are precise weighings accurate to the 0.01/th part of a pound. Temperature and pressure of steam entering and of condensate leaving the convector is measured; temperature of hot water entering and leaving is taken if it's a hot water test.

In a specially built room-within-a-room that floats on felt and rubber, delicate instruments pick out sound and vibration from heating and air conditioning equipment under test.

Sound meters are used to test the gross or over-all noise level of the unit. This instrument simply indicates whether the total noise from the unit is within the permissible level established by Trane noise standards. If objectionable noise is found, other instruments are used to pinpoint the source of the noise.

In locating noise and diagnosing remedies a stethoscope similar to those used by doctors was found to be very helpful. With end cups removed and the stethoscope fitted with steel prods, the technician can roam over the surface of the unit under test to locate the source of noise.

Once pinned down roughly, a vibration probe can take over to measure the source. The vibration probe is a pick-up something like the cartridge that picks up music from the record in a phonograph, provided with a rod which is touched to the suspected source. The probe is attached to the sound meter, and as the technician moves the probe about the test unit, he watches the sound meter needle respond, much as an "applause meter" needle responds on a television audience participation program.

An octave band analyzer determines frequency distribution of the noise within octaves (broad frequency bands corresponding

roughly to octaves in the musical scale).

A spectrum analyzer pins down the noise within the octave band to a specific frequency. For example, the laboratory technician may find noise in the 60-cycle range coming from a unit ventilator. He can suspect the fan motor as the source of the noise because it operates from a 60-cycle line frequency.

Any harmonic (a multiple of the fundamental frequency) of 60, such as 120, 180, can also be caused by the motor. Effective steps can then be taken to remove the source of the noise, such as improving motor vibration isolation methods.

Reciprocating refrigeration compressors and condensers are tested in an unusual calorimeter. As an electrically heated evaporator boils the refrigerant, the electrical energy consumed is measured by a photo-electric cell that counts the revolutions of a watt-hour meter. The flow and temperature drop of the refrigerant, condensing water, and the electrical energy consumed by the compressor motor is also measured.

Kaufman Handles Jordon Line In Pittsburgh Area

PHILADELPHIA—Jerry Kaufman, of Jerry Kaufman Associates, Pittsburgh, has been appointed factory sales representative for the Jordon Refrigerator Co., manufacturer of commercial refrigeration, upright home freezers, combination upright home freezers, and room air conditioners.

Kaufman will handle the domestic line of the company in the western Pennsylvania and western West Virginia areas.

Jerry Kaufman Associates was established in 1945, and maintains offices in the downtown section of Pittsburgh. The firm is also manufacturers' representative for other appliance lines, radio, and television sets.



Formal Opening

E. F. King, (left) president of the Thermal Co., St. Paul, and W. O. Corfield, district manager, Ebco Mfg. Co., set an Oasis air drier display on the counter of Thermal's new Minneapolis branch. The new office was recently formally opened.

Keiser Co. Moves to Utica

UTICA, N. Y.—The Keiser Co., export representative for various refrigeration and air conditioning manufacturers, has occupied new quarters at 304 Paul building, 209 Elizabeth St. here. The firm was located in New York City.

Unarco Names Lochner Eastern Sales Manager

NEW YORK CITY—Philip R. Lochner has been named eastern regional sales manager of the Union Asbestos & Rubber Co. effective July 1, it was announced recently by Edwin E. Hokin, president.

Lochner, who attended Rutgers university, started his business career with the National Cylinder Gas Co., Newark, N. J., and joined Unarco in 1940 as a rail-

road sales representative in the New York office.

In 1951 he resigned to accept a position with the National Waste Co. of New York.

Four New Officers Named At Brewer-Titchener Corp.

CORTLAND, N. Y.—Appointment of four new officers of the Brewer-Titchener Corp. was announced recently by James H. Greene, president, following a board of directors meeting.

The new officers are: J. F. Dwyer, vice president; E. R. Brewer, vice president; W. S. Brewer, vice president; and H. J. Flinn, treasurer.

At the same time, Greene disclosed the resignation of Mark E. Maxon, vice president and treasurer, who retired July 1.

Schaefer Appoints Five New Distributors for Frozen Food Cabinets

MINNEAPOLIS—Five new distributors for Schaefer frozen food cabinets have been appointed due to the creation of a separate division for frozen food cabinets by Schaefer, Inc., it was announced by H. N. Nafstad, sales manager. The following were named:

Electric Utilities Corp., Kansas City, Mo., for the Kansas City territory.

New England Refrigerator Co., Providence, R. I., for Rhode Island.

Peterson Fixture Co., Davenport, Iowa, for the Davenport territory.

The Schorer Co., Inc., Hartford, Conn., for Connecticut.

The Eastern Co., Cambridge, Mass., for lower New Hampshire and eastern Massachusetts.

Schaefer, Inc. has recently announced a new line of frozen food merchandising cabinets from 12 to 22 cu. ft. capacity. Included are the glass front open top cabinets with and without storage capacity underneath.

Air-Cooled Store Opens

NEW ORLEANS—Completely air conditioned, the largest Katz & Besthoff store in the chain has opened in the new Metairie shopping center, featuring self-service in four departments.

Only the NEW PA 400 gives you all these qualities!

Comparison of PA 400 and competitive desiccants

	PA 400	Competitive Desiccant		
		A	B	C
High Reserve Capacity	yes	no	no	no
Pre-attrited	yes	no	no	no
Low Pressure Drop	yes	yes	yes	no
Adsorbs Water Physically	yes	no	yes	yes
Non-dusting	yes	no	no	yes
Adsorbs Acids	yes	no	yes	yes
Will dry Freon 12 to below 2 ppm at 120°F	yes	no	yes	yes

*T.M. Reg. Applied For

And PA 400 has up to 98% increased moisture adsorption capacity. See your jobber today or write.

Progress Through Chemistry

DAVISON CHEMICAL COMPANY

Division of W. R. Grace & Co.
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Producers of Catalysts, Inorganic Acids, Superphosphates, Triple Superphosphates, Phosphate Rock, Silica Gels and Silicofluorides. Sole Producers of DAVCO® Granulated Fertilizers.

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Residential Air Conditioning

Plans Call for 700 Homes!

'Nation's Largest' Air Conditioned Housing Project Adding Homes at 10-a-Week Rate

LITTLE ROCK, Ark.—Hailed as the nation's largest air conditioned housing project when it was announced here last September, Fausett & Co.'s Broadmoor is rapidly becoming just that, according to a nine-month progress report.

Elbert L. Fausett, president of the local building company, revealed that production has been stepped up to the rate of 10 completed Broadmoor homes per week. He added that 178 homes had been sold, 130 started, and 80 completed when the report was compiled. Plans call for a total of 700 houses in the project.

Each all-brick, three-bedroom house is being built around year-round gas air conditioning. Design features that contribute to air conditioned comfort are 30-in. overhang, 4-in. blown-in glass fiber insulation, box cornices, and high windows in all rooms except the living room. Built-up white marble chip roofs reflect heat from

many homes in the project, and many trees on the site also help to cut down the heat load.

Such building techniques made practical the use of 2-ton Servel Wonderair "All-Year" gas air conditioners despite the fact that some of the houses run larger than 1,400 sq. ft., according to Fausett. The units are being installed by the Arkansas-Louisiana Gas Co. in cooperation with Servel, Inc.

The ranch-type homes are in the \$10,995 to \$17,000 price range, plus lot. However, appraisals by Federal Housing Administration officials have run as high as \$3,000 over the selling price, and are averaging \$2,000 over.

Features include kitchen exhaust fans, glazed ceramic tile in bathrooms and kitchens, custom-made kitchen cabinets, and remote control lighting.

William Van Valkenburgh is the architect. Bruce Henry is on-the-site engineer.

Air Conditioned Prefab Homes Start at \$12,000

ATHENS, Ga.—Builder T. J. Northcutt has constructed and is selling 87 three-bedroom, U. S. Steel "Gunnison" prefabricated homes equipped with Chrysler Airtemp year-round air conditioning.

Two models ranging from \$12,000 to \$12,800 are under construction throughout the Habersham Hill subdivision in south Athens. In addition to air conditioning, the homes feature completely landscaped lots facing paved streets, it was pointed out.

The air conditioning equipment installation utilizes normally wasted crawl space under the house thus increasing the kitchen area. Less utility room space is required since a gas-fired, 80,000-B.t.u. Airtemp horizontal furnace is matched with a 2-hp. Airtemp air-cooled condensing unit and evaporator coil centrally located in the crawl space.

Conditioned air is supplied through a perimeter duct system with outside wall outlets in each room.

The air conditioning system was designed and installed by White & Weir, Athens Chrysler Airtemp dealer. Joel Weir of the firm reported that a heavy weekend promotion spotlighting the air conditioning drew approximately 3,000 visitors.

Fifteen homes were sold.

4-Day Heating, Cooling Course Offered by University of Wisconsin from July 13-16

CLEVELAND—A special four-day course in summer cooling, air distribution systems, and heating problems will be stated at the University of Wisconsin in Madison from July 13 through July 16, the National Warm Air Heating and Air Conditioning Association announced recently. This is said to be the first such course to be held during a summer session.

Prof. R. C. Tegtmeier is in charge of arrangements and reports that many prominent members of the warm air heating industry will be on the program.

Classes are scheduled from 8 a.m. to 5 p.m. for the first three days with special evening activities on the second and third days. The fourth day will see classes held from 8 a.m. to noon, at which time a graduation luncheon will be served. After luncheon, certificates of completion will be awarded to all registrants completing their assignments.

A registration fee of \$25 will cover the cost of the NWAHACA library of manuals and floor plans of three classroom projects. Lodging and meals will be made avail-

able on the university campus.

In addition to summer cooling and air distribution systems, classroom instruction will cover school house heating, small pipe perimeter heating, and combustion efficiency.

Blueprints of a small home (1,000 sq. ft.), a large home (2,000 sq. ft.), and a small office building consisting of six offices, a reception room, an auditorium, and two washrooms will be furnished.

Problems involved in determining the heat loss and heat gain for each building will be worked out in class. The equipment for heating and cooling will be selected based upon the load estimates made, and air distribution problems will be solved. The completed project becomes the property of each registrant.

Among those scheduled to make addresses during the course are Bill Redrup, immediate past president of NWAHACA; Lorin G. Miller, technical consultant for the association; Guy Voorhees, technical secretary; and Bruce McLouth, chairman of the college short course committee.

Pryor Heads Filter Sales For Pittsburgh Plate Div.

PITTSBURGH—Appointment of Richard R. Pryor as manager of air filter products sales, Fiber Glass Div., Pittsburgh Plate Glass Co., has been announced by R. A. McLaughlin, director of fiber glass sales.

Pryor, formerly with Glasfloss Div. of Tilo Roofing Co., became associated with Pittsburgh Plate Glass early this year when Pittsburgh Plate acquired the manufacturing facilities and assets of the Glasfloss Div. at Hicksville, Long Island, N. Y.

Pryor brings to his new capacity more than 15 years of operational and sales experience in the textile and fiber glass industries.

From 1937 to 1947 he was associated with the Newark, Ohio textile plant of Owens-Illinois Fiberglass Corp. During that time he served as plant superintendent, manager of textile contract fabrications, and manager of yarn sales. He joined the Glasfloss plant in 1947 as filter sales manager.

Cedar Falls Manor Offers G-E Air-Cooled Units

CEDAR GROVE, N. J.—The first large home building project in the metropolitan New York area to offer air-cooled summer air conditioning is Cedar Falls Manor under construction by Paul Futterman and Edward J. Bergen.

In each home of the \$4,000,000 project will be installed a G-E automatic gas furnace, and if desired, the new G-E air-cooled air conditioning unit. Each home will have seven rooms including three bedrooms, built-in garage, finished recreation room, and modern kitchen with Hotpoint appliances.

Each plot in the project, which straddles Montclair Ave. eastward from the Pompton Turnpike, is landscaped and covers about a quarter acre. Prices range from \$15,900 to \$17,900.

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Refrigeration Problems

and their solution

by Paul Reed

For Service and Installation Engineers



Paul Reed

95-5 Solder

Over the past few months, several reports and letters have appeared on the relative merits of a type of solder composed of 95% tin and 5% antimony, and commonly referred to as "ninety-five-five solder." Perhaps our readers may be interested in having the matter reviewed, along with further comments and information that the author may be able to contribute on this subject.

EARLY EXPERIENCE WITH 95-5 SOLDER

Our first experience with 95-5 solder was, to the best of our recollection, about 1932—at least it was well over 20 years ago. The manufacturer with whom we were connected at that time had recently started to make condensing units in the larger sizes that required suction lines in sizes larger than 3/4-in. o.d. Soft copper tubing was available in 3/4 and 1-in. o.d.

sizes, but it was difficult to bend and otherwise handle in field installation, and it was difficult to run in neat, straight lines.

Consequently, we went to hard drawn copper tubing that came in straight lengths rather than in rolls. This hard drawn copper tubing, now frequently but not quite accurately called copper pipe, presented some entirely new problems and required an entirely new technique on the part of the installation men.

The most radical difference was that it was not practical to flare the hard drawn tube as we had been accustomed to do with the soft drawn tubing. This meant that joints had to be soldered instead of using flared tube fittings.

Nor was it practical to bend the hard drawn copper tube, so changes in direction had to be made with elbows. This meant many more joints than previously, and again, these joints had to be soldered joints.

So on an installation involving a 5-hp. condensing unit to which were connected five evaporators, for example, we might have several dozen soldered joints. At first this dismayed us quite a bit. We had had a good deal of experience with a certain type of sectional evaporator, the sections of which were assembled and soldered together on the job, and we had had more leaks than we liked to remember.

Many of these leaks had not shown up for weeks or months after the original installation. Almost invariably, an examination of the leak would show that a sort of blister would first appear in the fillet of solder, and not long after a hole would be eaten in the blister.

We laid this to not "boiling out" all of the soldering flux when the soldered joint was originally made, and that this flux gradually ate its way through the solder. We had used fifty-fifty solder (50% lead and 50% tin) and an acid paste.

After some investigation and several test installations, we decided to standardize on the use of 95-5 solder with a non-corrosive paste flux (No-ko-rode). At first, we had some trouble in getting good joints. We found that the installation man had to learn a new technique in soldering hard drawn tube and soldered ("sweat") fittings, with 95-5 solder.

THE THREE 'MUSTS' OF SOLDERING

We learned that there were several very important points that had to be recognized and mastered in making a good 95-5 soldered joint. Foremost among these, and of about equal importance, were the following:

1. As in any other successful soldering operation, the surfaces to be soldered together had to be clean, and the outside, tarnished "skin" of these surfaces had to be sanded off down to the raw, bare metal. This had to be done just before the joint was soldered; otherwise, oxidation would start and the bright, raw metal would be fouled with the copper oxide formed on the metal surfaces. On this there could be no compromise; the surfaces, both the outside of the end of the tube and the inside of the fitting had to be clean. A thin layer of paste was then applied to the outside end of the tube and to the inside of the fitting. A small brush was found best for this purpose. No oil could be present, not even from the finger of the solderer.

2. The fit between the end of the tube and the fitting, whether of the forged or wrought type, had to be right. The clearance had to be about 3 to 6 thousandths of an inch between the tube and the fitting, which makes it a snug, or what might be best described as a moderate slip fit.

Obviously, it could not be a tight fit, for the solder had to enter, but it was found to be highly important that it not be a sloppy, wobbly fit. The fit for 95-5 is about one half what it is for a soft soldered joint, which is about 8 to 12 thousandths.

This fit depended upon the manufacturers of the tube and of the fitting. Originally, these had been for use primarily in the plumbing trade for water lines, where a gas-tight joint was not required and where 50-50 solder was widely used. We had to be careful in our buying, for at first all the tube and fitting manufacturers did not hold their tolerances close enough to assure the proper fit required for

95-5. Now, however, all of the manufacturers recognize the necessity of the proper fit for refrigeration purposes and maintain the required close tolerances.

3. Care had to be exercised in heating the joint and in judging the time when the 95-5 was to be applied. The flame was applied to the fitting at the tube end, and the heat tested occasionally with the solder. A gasoline blow torch could be used, but it was cumbersome, and the flame was apt to be too big. A small acetylene torch with a portable tank (Prestolite) was found most suitable.

The flame had to be small enough that one end of the fitting could be soldered without unsoldering the other end, and yet large enough to heat both the top and bottom of the joint. Also the flame had to be clean and not leave a carbon coating on the joint.

Soldering with 95-5 has to be done at a slightly high temperature than with 50-50. Both start to melt at 360° F. but soft solder flows freely at 415° F., while 95-5 does not flow freely until it reaches 465° F. Neither temperatures are high enough to cause the rapid scaling found with brazing or welding.

SOLDERING DEPENDS ON SKILL

Soldering is somewhat of an art, and skill must be obtained through experience. No one can simply read how to do it and then

go and do a good soldering job. However, it can soon be mastered with some practice.

We have stressed these three essential points as they have a bearing on later paragraphs of this article. Failure to observe these precautions has undoubtedly been responsible for most of the failures to make permanent, soldered joints using 95-5 solder.

Within the next 10 or 12 years after 1932 we installed in the home city of this manufacturer several hundred installations of various types from ice cream hardening rooms and market fixtures to air conditioning, and involving as much as 75 hp. on one installation.

The refrigerant lines of all of these installations, involving literally thousands of soldered joints, were soldered with 95-5 solder. A report of less than a month ago from the service manager of this manufacturer states that leaks have been and still are very rare, even on those installations made over 20 years ago.

95-5 IS DEPENDABLE AND PERMANENT

There seems to be, therefore, little reason to suspect that a tube and fitting joint made with 95-5 solder, if properly made, will not be dependable or permanent. This record is certainly impressive and would seem to attest to the reliability of 95-5 solder if used with reasonable care.

(To Be Continued)

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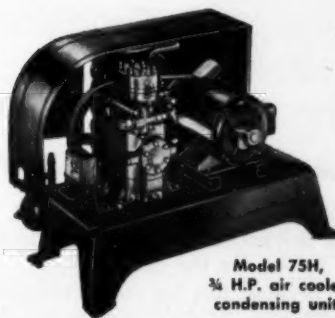
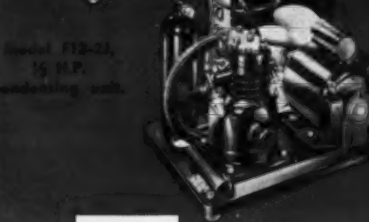
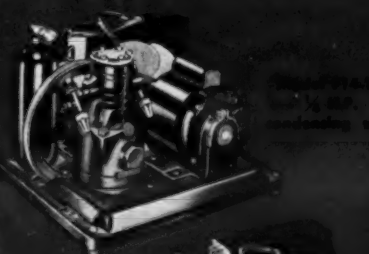
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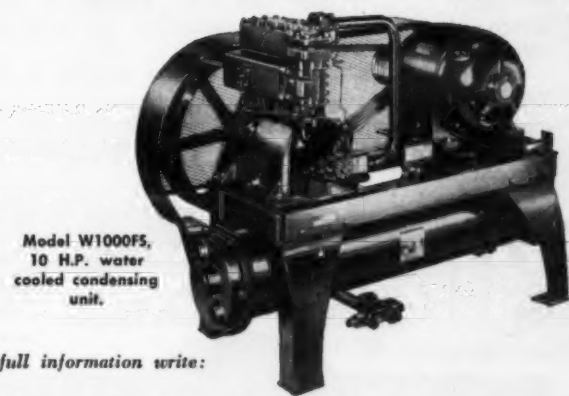
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Theory and Practice of Heat Pumps

Part I — Heat Sources

With interest in heat pump air conditioning systems continuing to mount, the News presents a concise explanation of the principles involved in such systems, in a series of articles by K. D. Cunningham.

There will be some emphasis noted on the "water-to-water" type heat pump in this series of articles, as the author has been concerned principally with the development of this type system.

By K. D. Cunningham, Acme Industries, Inc., Jackson, Mich.

Interest in the heat pump, or reverse cycle refrigeration system as a means of winter heating of residences and all types of commercial and industrial buildings is definitely gaining in many parts of the country. While many "experts" have taken the position that heat pumps could only be used in the south, or in areas having a very favorable power rate, recent experience tends to prove the heat pump to be a satisfactory and efficient method even in severe winter climates.

Refrigeration is now being used to heat various types of buildings in Michigan, Wisconsin, Seattle, Wash., and Toronto, Ont., Can. Successful installations have been made in Colorado, where winter design conditions are -30° F.

Because heat pumps have an operating efficiency of approximately four to one (power input ratio to heat produced), cost of

operation at normal electrical rates is far from exorbitant.

Aside from considerations of operating efficiency, heat pumps have the advantage of saving the space occupied by boilers and fuel storage facilities, greater cleanliness, and freedom from maintenance. Hence if the building owner considers the value of additional space, the saving in cleaning costs, and the saving in maintenance, he may well discover the heat pump to be his lowest cost method of winter heating.

Further, with the system reversed in summer, he is able to have the many advantages of summer air conditioning without the purchase of additional equipment.

PROPERTIES OF WATER USED

Any source of water used in the water-to-water type heat pump should have the required physical,

chemical, and thermal properties. From a physical standpoint the water must be relatively free of foreign and gaseous matter, such as sand, waste matter, or other corrosive elements.

Chemically, the water must not be of excessive hardness, or contain certain salt brines, hydrogen sulfides, or other corrosive elements.

During the heating season the water should have a temperature of 45° F. or higher, although it is possible to operate a heat pump system with water temperatures as low as 39° F. if special equipment is used. In many cases water pumped from below the surface of a frozen lake or stream will be found to be warm enough to be a satisfactory source of heat.

COMMON WATER SOURCES

The three sources of water most commonly used in the operation of water-to-water type heat pumps are: 1. Well Water, 2. Lake or River Water, and 3. City Water.

The volume of water used will, of course, depend upon its temperature. Water consumed will vary from 0.1 to 0.3 gallons per minute per 1,000 B.t.u., depending both upon the volume of water available and its temperature. Exact water requirements and pumping rates may be determined by referring to the Flow-Temp Heat Pump Engineering Data.

INSTALLATIONS USING WELL WATER

The depth and size of the well will vary with the locality and the amount of water required for satisfactory operation of the Flow-Temp heat pump. After determining water requirements from engineering data, consult your local well driller to determine the depth and size of the well.

After the well has been drilled, and before it is attached to the heat pump, it should be pumped out until it is absolutely free of all cuttings and sand. Should a continuous sandy condition exist, a proper sand trap or filter should be installed.

WATER DISPOSAL SYSTEM

After the well water has been used in the Flow-Temp heat pump it must be disposed of by one of several methods, depending upon local conditions. If the water is going to be put into the city sewer system, the sewer capacity should be checked, together with special sewer taxes and charges that now exist in many communities. In certain cases the used water may be piped to a nearby river or lake.

However, where such systems are not available or when the conservation of well water is required, a water disposal system using two wells, or one well is recommended.

TWO-WELL SYSTEM

In areas where well water is found in strata, the two-well system shown in Fig. 1 is commonly used. Since underground water has a direction of flow, the disposal well should be located downstream from the supply well, at a distance of about 100 ft. Size of the disposal well will again be determined by local conditions.

ONE-WELL SYSTEM

In areas where well water is found in veins rather than in strata, it may be impractical to have a two-well system. Where a one-well system as shown in Fig. 2 is used, an additional drain con-

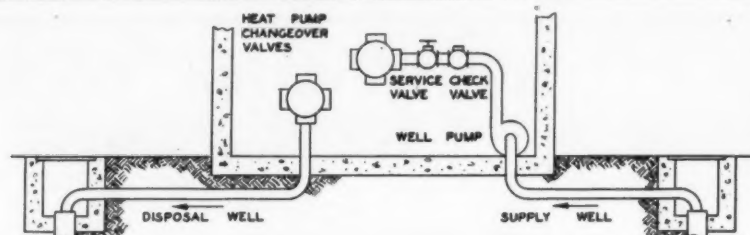


FIG. 1—Setup for two-well system where well water is found in strata.

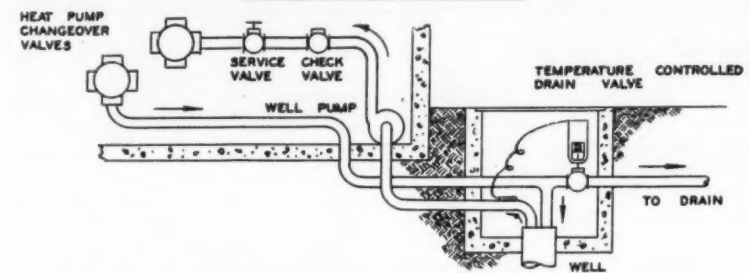


FIG. 2—A one-well system, showing use of an additional drain connection.

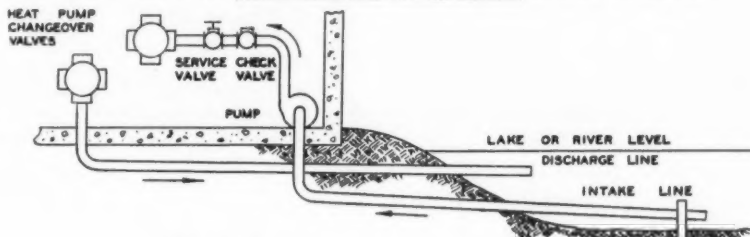


FIG. 3—Piping for a lake or river installation.

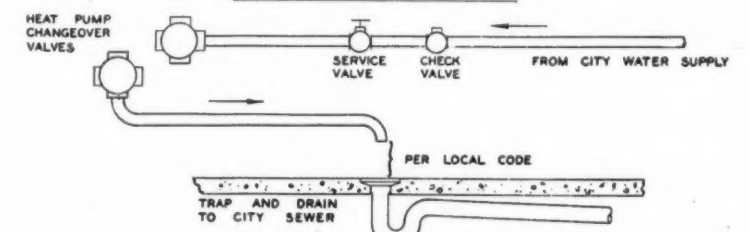


FIG. 4—Where city water is used, water is normally returned to sewer system through a trap, but local codes must be observed.

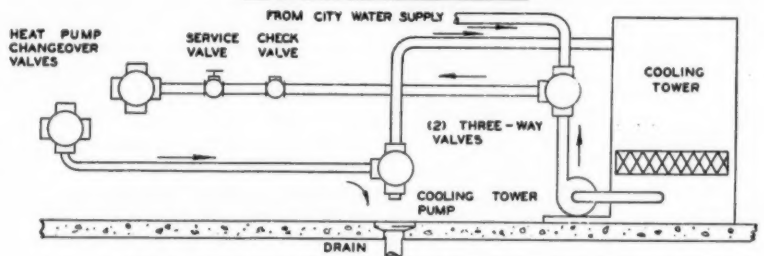


FIG. 5—Use of a cooling tower to reduce water consumption.

nection should be provided.

To avoid dilution of the supply well, to a point where the efficiency of the heat pump is affected, a temperature control valve installed in the manner shown in Fig. 2 permits a certain portion of used water to be bled away to the drain, where the water is disposed of in any convenient manner.

Although Fig. 2 shows two pipes within the well casing, it is important that the supply and disposal drop pipes terminate at different levels, so the well water will not be constantly recirculated.

INSTALLATIONS USING LAKE OR RIVER WATER

In locations where lake or river water is available it is ideal for use with the heat pump, as the water temperature remains fairly constant through the heating season, even when the surface of the lake or river is frozen, provided the intake is located at least 3½ ft. below the ice line. A typical lake or river installation is shown in Fig. 3.

The installation and discharge lines should be located as far apart as practical, and in the case of a river, the discharge line should be located downstream from the intake piping.

COMBINATION SYSTEMS

In actual heat pump practice, various combinations of well water, lake water, and river water systems will be encountered. For example, a residential system at Parma, Mich. obtains water from a flowing artesian well, and the water is returned to an outdoor trout pond where the owner is engaged in raising brook trout.

This pond drains by natural means to a nearby stream, so in actuality the flowing artesian water is simply diverted to the heat pump system. In other cases, water may be pumped from a well

and returned to a stream or drainage ditch.

INSTALLATIONS USING CITY WATER

Water from city supply systems may be used where it is low in cost or where other sources of water supply are not available. In this instance, the water is normally returned to the city sewer system through a trap, as shown in Fig. 4. Installations of this type must be made according to local codes, and special sewer charges should be taken into consideration.

WITH COOLING TOWER

In warmer climates where the maximum water consumption occurs during the summer cooling season a cooling tower may be connected to the system, as shown in Fig. 5. In this system, water is taken from the city water supply and returned to the city sewer.

The cooling tower conserves water during periods of maximum demands, as it uses a maximum of only 5% of the water normally required. Fig. 5 shows how the cooling tower is by-passed during the heating season, by means of the two 3-way valves.

WITH GROUND COILS

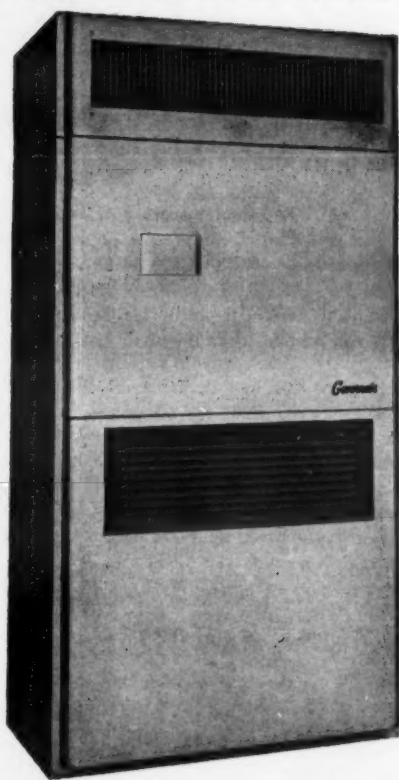
In those parts of the country where water is not readily accessible, the earth itself may be used as a heat source. By recirculating an anti-freeze solution of ethylene glycol through a pipe coil system in the ground, a continuous flow of heat is maintained to the pump.

AIR-TO-AIR SYSTEMS

The outside air may be used as a source of heat, but because of the lower air temperatures encountered when the greatest amount of heat is needed, many of these systems will require auxiliary heating of some kind.

(To Be Continued)

An "Upright" Air Conditioner!



Governair
Type SC
Conditioner

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AIR CONDITIONERS



COMPLETELY PACKAGED AIR CONDITIONERS



BLAST COILS FOR HEATING & COOLING



EVAPORATIVE CONDENSERS

GOVERNNAIR

*Type SCU Conditioners Patent No. 2,297,928

GOVERNNAIR CORPORATION • 513 N. Blackwelder • Oklahoma City, Okla.

Refrigerated Vendors Seen As Way To Ease Milk Surplus In Calif.

LOS ANGELES—With three refrigerated milk vending machines now being operated here and a similar number in Bakersfield, several southern California dairy distributors are studying the possibilities of such devices as a means of reducing surplus milk.

The Kern County Dairyman's Association set up the machines in Bakersfield. Located out-of-doors on heavily-traveled streets, the coin-operated machines dispense a quart carton of milk upon insertion of two dimes and two pennies.

The three machines being operated in Los Angeles' southeastern section were set up by Superior Milk Products Association of Artesia, a cooperative dairy firm. Two of the vendors are located in vacant lots near ice cream stores and the third in a spot near Long Beach.

These machines dispense both quarts and half-gallons of milk. Quarts sell for 20 cents, half-gallon containers for 40 cents—the same as stores charge. About 80 quarts and almost as many half-gallons are sold daily through each machine, the company said.

Many other dairy firms are now taking a long look at milk vending machines according to a spokesman for the General Dairy Industry Committee.

Central Ice Machine, Omaha, Appointed Frick Distributor

WAYNESBORO, Pa. — Appointment of Central Ice Machine Co., Omaha, Neb., as distributor for Frick refrigerating and air conditioning equipment has been announced.

Central Ice Machine will cover Nebraska, eastern Iowa, and southern South Dakota, and will have the cooperation of Van J. Sparks, manager of the Frick district office, Kansas City, Mo.

Supermarket's Huge Frozen Food Sales--

(Concluded from Page 1, Col. 4)
food items and "the capacity to maintain a huge stock," as Cito put it.

WAREHOUSE SPACE FOR 20 CARLOADS

In 1951, Miller Supermarkets built one of the largest frozen food storage warehouses in the nation, with capacity for 20 carloads, at the Brighton Blvd. headquarters plant.

Here, in a series of rooms which can be maintained at -10° F., sufficient storage capacity is available that the supermarket chain has been able to make advantageous buys in major quantities and, in this way, largely "control volume as we wish."

The Brighton Blvd. storage facilities have been at least in part matched in the construction of recent Miller stores, including new supermarkets at East 34th Ave. and Elizabeth St. and in the Cherry Creek shopping center.

Each was laid out with frozen foods expansion in mind, and each includes three large walk-in refrigerators in the basement and electric conveyors from shipping room to the frozen foods area. This makes it possible to handle as much as six times more frozen foods than in previous stores.

Also, the number of self-serve refrigerated display cases, provided by Hussmann, has been increased in newer stores. Both of the latter markets feature more than 110 lineal ft. of frozen foods display space.

SPECIALTIES OFFERED

The upsurge in frozen foods volume throughout all stores coincides rather closely with the introduction of prepared frozen foods specialties, according to Cito.

Important in this connection, he pointed out, are such developments as frozen ravioli, pizza pie, chicken pie, tuna salads, a variety of Italian food specialties, frozen baked goods, chicken-a-la-king, and waffles.

In Cito's opinion, the pull of such swiftly-prepared, convenient items has been the turning point in converting busy housewives from canned foods to frozen varieties.

In each of the Miller Supermarkets at least one and in many instances two or three cases are devoted to sharp-frozen specialty foods of this nature, and with heavy success in every instance.

'LEADERS' OFFERED IN NEWSPAPER ADS

Such specialties, incidentally, have dovetailed neatly with the store's policy of offering one or two frozen food "leaders" in every major newspaper advertisement.

That these leaders do the work of introducing frozen foods successfully to a large percentage of the buying public is well illustrated by personal interviews taken with "average housewives" throughout the 22 Miller stores.

In almost every instance, the housewife interrogated said she had been using frozen foods only for the past couple of years and, except for such "standbys" as frozen peas and vegetable mix, made little use of the department until the revelation of flavor and ease which some specialty bought on price appeal gave her.

Asked whether the increase in the sale of frozen vegetables had cut appreciably into fresh produce volume, Cito's answer was a qualified "No." He cited as one illuminating example, the Denver chain's experience with broccoli.

Always of insignificant rank in the produce department, broccoli has become a mainstay in the frozen foods department, to the point that thousands of families serve it regularly who had scarcely encountered the item before.

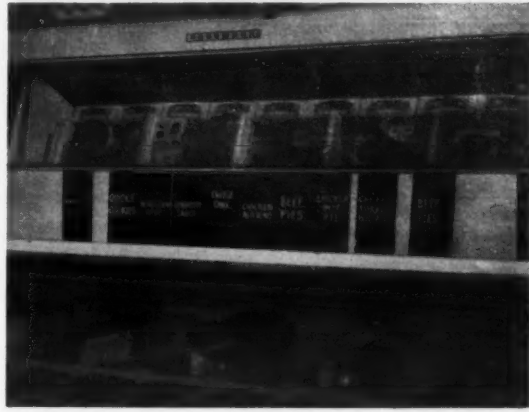
Broccoli sales are thus "plus business" as far as produce is concerned, and there are indications that increases in broccoli sales in the various produce departments hinge directly upon the fact that the customer developed a taste for the vegetable "via the frozen foods route."

FROZEN PEAS SUPPLANT FRESH, CANNED ONES

On the other hand, Cito noted, it may be true that frozen pea sales have largely supplanted fresh pea sales in the produce department and have made definitely measurable inroads on canned peas.

The situation is different, almost item by item, he pointed out, but in the main it can be readily said that frozen food sales are actually benefiting sales in other depart-

Commercial Refrigeration



FROZEN FOOD specialties are centered in one case where the shopper learns to look for them and any new items the store may be featuring. This device is considered a merchandising "ace" by the management.

ments rather than chopping down on their volume.

There is no such thing as a "typical month" in frozen foods merchandising throughout the Miller stores, Cito said, nor do sales fall into a set pattern month by month through the year.

"Instead, we can control the volume and the month's results entirely on the basis of what we offer for that month," Cito said.

"Thus, there is no such thing as a pre-determined low sales month or high sales month, it being merely a combination of what we have to offer and management's decision on promotions which influences any given month's sales."

SPECIALTY ITEMS KEPT IN SEPARATE CASE

A merchandising "ace," according to Cito, is the use of a separate display case in which all of the prepared specialty foods mentioned earlier are shown. The housewife soon learns that anything brand new in frozen food offerings will be found in this case.

Another factor, which has weighed heavily in skyrocketing frozen food sales is the careful selection of accessory items which are displayed along the ledge, directly above the frozen foods item.

For example, over frozen seafoods appear bottled dressings, glass-packed tartar sauce, mayonnaise, etc. Over frozen macaroni, ravioli, and Italian foods are shown such items as Parmesan grated cheese, and tomato paste.

Each store has a public address system which, at regular intervals (usually every 5 minutes or so during busy shopping days) is used for announcements on frozen foods specials, new products in the cases, etc.

Ice cream and frozen fish are carried by Miller Supermarkets

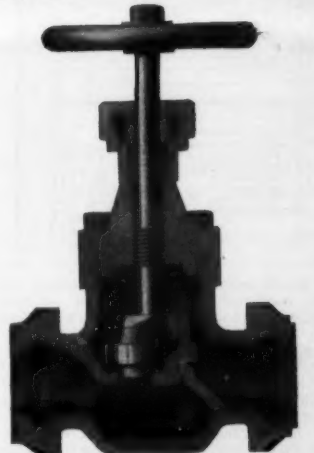
under the frozen foods heading, but separately warehoused.

In frozen seafood specialties, Miller's has made much headway with such specialties as African rock lobster tails, lobster newburgh, greater variations in shrimp offerings, filets, mountain trout, etc.

A point worth mentioning in connection with Miller's frozen foods display is the use of white lettered, blue rectangular signs, 10 in. by 5 in., which are slipped into rails along the rear of each frozen foods case to identify the product immediately below them.

Frick Valves

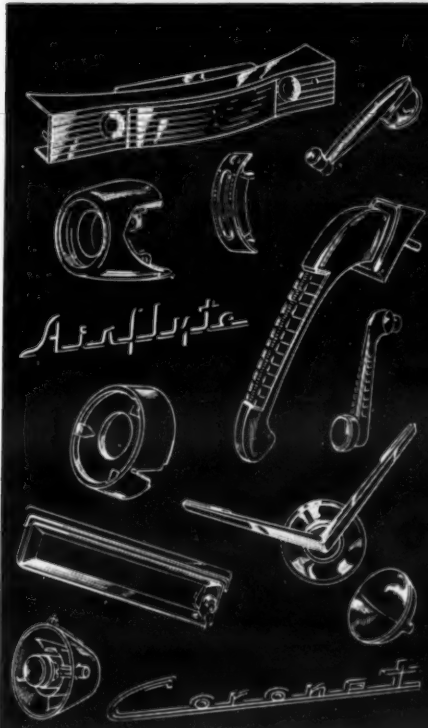
Are preferred for both ammonia and Freon service. Exclusive features, such as high-angle seats, are described in Catalog O, which also gives pipe sizes, weights, dimensions and prices. Get your copy now.



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VALVE DIVISION

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Two Grand Rapids Brass Company plants now produce more than 17,000,000 plated, finished die castings each month.

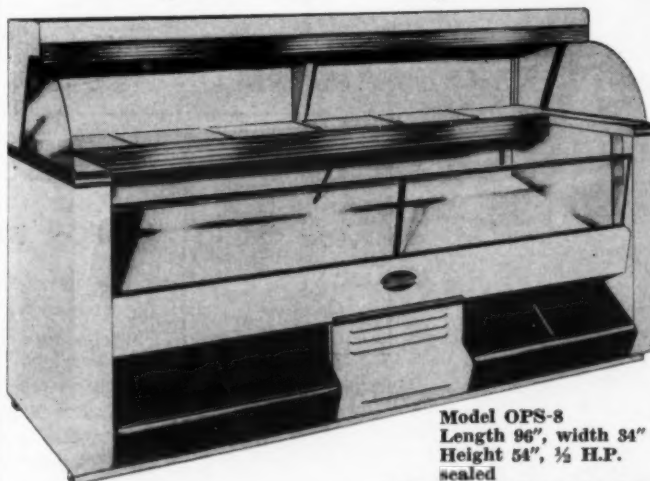
If you require quality castings electroplated or baked synthetic lacquer finished delivered in large quantities on schedule, Grand Rapids Brass Company's design engineers and more than 1,000 skilled employees will prove of invaluable help.

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Model OPS-8
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The NATIONAL produce merchandiser, for fruits and vegetables, is a compact, self-contained cabinet. Ready to plug in. Made with heavy gauge steel, hi-gloss, white baked enamel finish.

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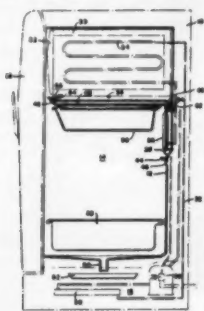
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PATENTS

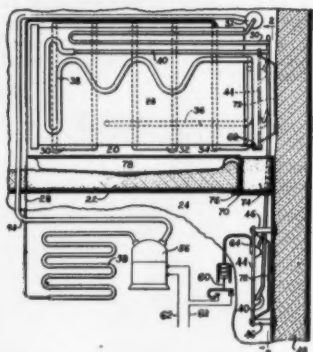
Week of March 16
(Continued)

2,672,026. TWO-TEMPERATURE REFRIGERATOR HAVING SPECIAL AIR DIRECTING Baffle. John M. Murphy, Oakwood, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application March 4, 1953, Serial No. 274,691. 2 Claims. (Cl. 62-103.)



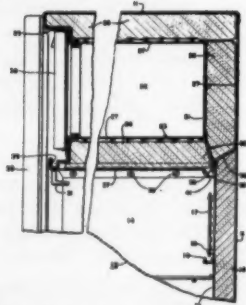
1. In a refrigerator having a food storage compartment and a frozen food compartment, a first evaporator for cooling said frozen food compartment, a second evaporator for cooling said food storage compartment, said frozen food compartment being disposed above said food storage compartment, an outer door for providing access to said compartments, an inner door for said frozen food compartment, said second evaporator comprising a plate type evaporator disposed horizontally adjacent the upper rear portion of said food storage compartment, an air directing baffle supported beneath said frozen food compartment so as to intercept condensate formed on the lower surface of said frozen food compartment and to convey said condensate to a point substantially above said plate type evaporator, means for directing the condensate leaving said plate type evaporator onto the rear wall of said food storage compartment, a food drawer, and means for slidably supporting said food drawer adjacent the bottom surface of said baffle whereby said baffle serves to close the upper side of said drawer.

2,672,025. PLURAL TEMPERATURE REFRIGERATING APPARATUS. Clifford H. Wurtz, Oakwood, Ohio, assignor to General Motors Corp., Dayton, Ohio.



3. A refrigerator cabinet including insulated walls enclosing a freezing compartment and a food compartment, a partition wall separating the freezing and food compartments, a box shaped freezing evaporating unit in the freezing compartment, a generally flat evaporating unit having flexible connections with the freezing evaporating unit, said freezing evaporating unit having support means for removably supporting said generally flat evaporating unit adjacent its rear wall, said partition wall being provided with an opening adjacent the rear of the partition wall between the freezing and food compartments sufficiently large to permit the movement of the entire generally flat evaporating unit downwardly through it, and means for supporting said generally flat evaporating unit in vertical position beneath said opening.

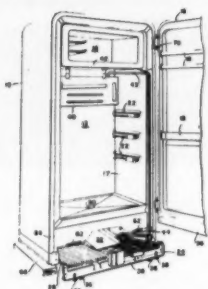
2,672,027. PLURAL REFRIGERATED COMPARTMENTS WITH CONDENSATE DISPOSAL MEANS. Clifford H. Wurtz, Oakwood, Ohio, assignor to General Motors Corp., Dayton, Ohio.



1. A refrigerator comprising, a cabinet having outer walls, an open top metal liner spaced from said cabinet outer walls, insulating material in the space between said cabinet outer walls and said liner, the open top of said liner being located a substantial distance below the top wall of said cabinet and forming a food storage compartment in the lower portion of said cabinet, means for refrigerating the interior of said lower food compartment to a temperature above freezing, a second metal liner above said open top liner spaced from said cabinet outer walls and forming another food storage compartment in the upper portion of said cabinet, means forming a plurality of refrigerant evaporating passages about said second liner for cooling the interior of said another food compartment to a temperature below freezing, insulation in hermetically sealed bag form in the space between said cabinet outer walls and said

second liner pressed against said refrigerant passage forming means, a plate spaced from the bottom of said second liner forming the top of said lower compartment, insulation in hermetically sealed bag form in the space between said second liner and said plate pressed against said refrigerant passage forming means, means for supporting said plate from said open top liner, said last named means being in the form of a trough extending along edges of said plate, said trough being adapted to receive condensate water from the spaces in which said bagged insulation is disposed, and means for directing water received in said trough into said lower food storage compartment.

2,672,029. REMOVABLE UNIT IN REFRIGERATING APPARATUS. Orson V. Saunders, Dayton, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application March 18, 1952, Serial No. 277,112. 6 Claims. (Cl. 62-117.2.)



1. In a refrigerator assembly, a sheet metal outer cabinet member having a front opening, a door for said front opening, an inner liner forming a food storage chamber within said cabinet, insulating means between said outer cabinet and said inner liner, evaporator means for cooling the contents of said inner liner, a refrigerant liquefying means for supplying liquid refrigerant to said evaporator, means including a frame for removably supporting said refrigerant liquefying means on said outer cabinet member beneath said food storage chamber, a plurality of shelves slidably mounted within said inner liner for movement forwardly of said cabinet whereby the cen-



PROCUREMENT INFORMATION

The following is a list of proposed procurements issued by the various indicated U. S. Government procurement offices. This list is compiled and made available daily on a free pick-up basis. Prospective bidders may obtain complete bid sets by a request to the purchasing officer under which the purchase is listed in this Synopsis. Be sure to identify completely the bid invitation you wish by including in your request the item description, the invitation number or reference number and the opening date.

It is not necessary to refer solely to the issuing office for additional data on a bid invitation issued by any of the following U. S. Army Ordnance Offices: Ordnance Tank Automotive Center; Detroit Arsenal; Frankford Arsenal; Picatinny Arsenal; Raritan Arsenal; Ordnance Ammunition Center, Joliet, Ill.; Rock Island Arsenal; Springfield Armory; Watertown Arsenal; and Watervliet Arsenal. Complete information on any purchase listed by any of those offices alone can be obtained from the Ordnance District Office nearest you. Its address is on file in your nearest Department of Commerce Field Office. Do not ask an Ordnance District Office for information on a purchase unless it is listed by one of the above-named offices.

Invitations for Bids numbers will be followed by the letter "B." Requests for proposals or quotations will be indicated in this column by the letter "Q" or, if numbered, the number will be followed by the letter "Q."

DEPARTMENT OF DEFENSE

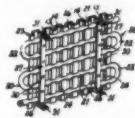
Description	Quantity	Reference No.	App. Bid Date
Public Works Office, Marine Corps Base, Camp Lejeune, North Carolina			
Air Conditioning Camp Cafeteria, Bldg. No. 1006, Deposit Check \$10.	Job	42773B	19 Jul 54
District Public Works Office, Eleventh Naval District, San Diego, California			
Cold storage bldg., Mord	Job	42837	27 Jul 54

ter of gravity of the assembly is adapted to be shifted forwardly upon forward movement of one or more of said shelves, said frame including floor engaging means extending out in front of said cabinet member so as to provide a vertical support for said cabinet in front of said front opening.

2,672,324. TUBE AND PLATE TYPE HEAT EXCHANGER AND METHOD OF MAKING. Louis Weiss, St. Louis, Mo. Application Sept. 29, 1948, Serial No.

51,780. 6 Claims. (Cl. 257-262.18.)

2. In a coil and plate assembly, a plate of conductive material formed to provide



a series of spaced parallel ridge portions, the plate being apertured so as to provide

vide paired aligned apertures in opposite sides of each of a plurality of said ridge portions, a length of tubing extending through a series of the aligned apertures, each of said ridge portions being slotted in its upper surface with such slots of lesser width than the tubing diameter and connecting the paired apertures in the opposite sides of the ridge portion, the length of tubing extending through a number of said apertures in the ridge portions, and lying beneath and extended along said slots.

Government Contracts

Galveston District, Corps of Engineers, P.O. Box 1229, Galveston, Texas

Airmens Service Club, Job (ENG-41- 10 Aug 54 243-55-2B)

Laredo A.F.B., Texas. Work consists of Const. of 1-Story Semi-Permanent Wood Frame Structure of Approx. 10,829 sq. ft. of Floor Area. Service Club will be provided W/Summer & Winter Air Conditioning Except Kitchen Area which will be served W/ Separate Heating System. Air Conditioning to Consist of 3 separate Zones ea. served by a package Unit W/Hot Water Coil for heating.

Wing Headquarters Bldg., Job (ENG-41- 11 Aug 54 243-55-3B)

Lake Charles A.F.B., La. Work to consist of Const. of a wood frame 2-story Bldg. of Approx. 120,000 Sq. Ft. Floor Area, Complete W/Air Conditioning.

GENERAL SERVICES ADMINISTRATION

General Services Administration, Business Service Center, Region 3, 7th and D Sts., S.W., Washington 25, D. C. Exhaust fans. 4 ea. 4H-47349R 30 Jul 54

CONTRACTS AWARDED THROUGH JULY 2

Public Works Office, Eleventh Naval District, San Diego 32, California

Conversion of building No. 7 to Cold Storage Building. Naval Supply Depot, San Diego, Calif. NOy-82969.—Job, \$289,800.—L. C. Anderson Co., 3040 Hancock St., San Diego, Calif.

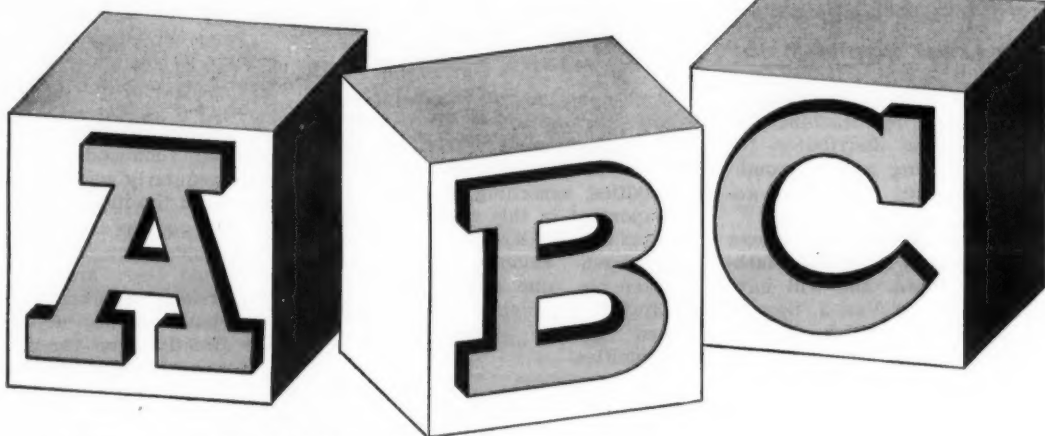
Sacramento Air Materiel Area, McClellan Air Force Base, McClellan, California

Refrigerating Equip. and Parts.—Various Types & Quantities, \$71,058.—Moore & Hanks Co., 9702 E. Rush St., El Monte, Calif.

Purchasing and Contracting Office, 3800th Air University Wing, Maxwell Air Force Base, Alabama

Construction of air conditioned addition to building 745, Maxwell Air Force Base, Alabama. 01-600-54-63.—Job, \$41,900.—Bell and Williams, P.O. Box 1603, Montgomery, Alabama.

THE



OR WHY... IT PAYS TO ASK... "IS IT PAID?"

A

... IS FOR AUDIT

The Audit Bureau of Circulations audit of a magazine is a standard measurement, verified by a standard, impartial method of checking.

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a score of other important facts to help the advertiser make intelligent media decisions.

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WHICH IS WHY IT PAYS TO ASK... "IS IT PAID?"

B

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People do not read business magazines for entertainment, but for news of their industry, and for ideas to help them with their jobs.

Before a prospective subscriber sends in his check (or asks his company to send in its check) he must be convinced that the publication will provide the type of reading he feels he needs.

The acceptance of a subscription establishes a contractual relationship between the reader and the publisher. Because the reader shares the cost of publishing, the publisher must see that he

gets the magazine for the life of the subscription, and the editors must maintain the interest of the reader.

Without reader interest, the publisher of a paid-for magazine can't get circulation. Without circulation he can't get advertising... and without advertising he goes out of business.

Conversely, new subscriptions and renewals are an indication that a publication is *wanted* by readers. Evidenced by cash-in-advance subscriptions, such reader interest makes the magazine an excellent advertising medium.

ANOTHER REASON WHY IT PAYS TO ASK... "IS IT PAID?"

CLASSIFIED ADVERTISING

RATES for "Positions Wanted" \$7.50 per insertion. Limit 50 words. 15¢ per word over 50.

RATES for all other classifications \$10.00 per insertion. Limit 50 words. 20¢ per word over 50.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count. Please send payment with order.

POSITIONS WANTED

ATTENTION, MANUFACTURERS—Maybe you don't need a full-time writer for your instruction sheets and manuals. In that case, it will pay you to look into a new writing service offered by a practical refrigeration and air conditioning man who can handle clear "American" English. **VIRGIL C. JAMES**, Cuba, Missouri.

YOUNG, CAPABLE salesman with 15 years of sales and advertising experience would like position with progressive air conditioning manufacturer. Believes the industry has tremendous future and wants to grow with it. Experienced in setting up distribution. Married. Resides in Chicago. Excellent references. Write **BOX A4597**, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

PRODUCTION FOREMAN for small mid-west plant—man who has worked in manufacture of large cooling coils, evaporative condensers, etc. and understands refrigeration manufacture and application of compressors. Write **BOX 4592**, Air Conditioning & Refrigeration News giving education, experience, salary desired, etc.

MANUFACTURERS REPRESENTATIVES. Leading manufacturer low-temperature prefabricated sectional walk-in freezers and coolers has open territories for aggressive manufacturers represent-

tatives. High quality product accepted by outstanding national users. Extremely saleable item to frozen food distributors and packers, ice cream manufacturers and their outlets, super markets, dealers and industrial users. High unit sale on specialized item with little competition. **BOX A4598**, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

HAVE 7 YORK top section models 450 and 450A in good working order and several bins—will trade for Ajax Ice Machines models A5A-2 or A5A-4 units or Frigidaire cuber. Please advise serial numbers and particulars. **AUTOMATIC COOLING & HEATING COMPANY**, 6734 Central Avenue, St. Petersburg, Florida.

ATTENTION SERVICEMEN: Send for our refrigeration parts and supplies catalog. Save up to 50% on many items. Relays, V belts, T.X. valves, fittings, controls, driers. New—guaranteed merchandise. **WALTER W. STARR REFRIGERATION**, 2833 Lincoln Avenue, Chicago 13, Illinois.

1 McQUAY LOW-TEMPERATURE LT5-sharp freeze blower coil for use with 5 h.p. compressor. 1 Kramer low-temperature coil. 1 2 h.p. Copeland Compressor. All in good condition. Best offer taken. **WESTERN SERVICE**, 912 Front Street, Fargo, North Dakota.

BUSINESS OPPORTUNITIES

REFRIGERATION & air conditioning business for sale. Beautiful showroom, offices, & warehouse for lease. Located in city of over 100,000 population. Frigidaire commercial franchise plus other of the top associated lines. Established over 20 years ago. Includes all necessary equipment, tools, vehicles, reconditioning & service facilities. **BOX A4599**, Air Conditioning & Refrigeration News.

Jacobson & Co. Handles Burgess-Manning Ceiling

CHICAGO — Jacobson & Co., eastern acoustical contractor, has been named an exclusive territorial contractor for the new Burgess-Manning "3-Way Functional Ceiling" that heats or cools radiantly and incorporates acoustical control, Dudley W. Day, vice president, Burgess-Manning Co., has announced.

The Jacobson territory will include the New York, New Jersey, and eastern Pennsylvania areas.

"The 3-Way Functional Ceiling, which has been installed throughout the new 30-story Alcoa building in Pittsburgh, and in numerous hospitals, schools, cafeterias, and commercial buildings in several parts of the country, utilizes perforated aluminum panels heated by hot water for radiant heating," Burgess-Manning pointed out.

"Water coils are covered by an acoustic-thermal blanket that provides sound control. In warm weather cold water is circulated through the coils to provide radiant cooling."

Jacobson will handle the new ceiling through its offices in New York, Elizabeth, N. J., and Philadelphia and Harrisburg, Pa. The company is one of the oldest ceiling contractors in the country, dating to 1889. It has been in the acoustical business exclusively since 1932.

Westinghouse Forms Fair Trade Committee

MANSFIELD, Ohio—The formation of a fair trade enforcement committee to develop and coordinate the newly-intensified program of the Westinghouse Electric Appliance Div. was announced here recently by Robert M. Oliver, manager of portable appliances.

"Functions of this committee," according to Oliver, "will be the close coordination of sales and legal activities in the interests of the maintenance of fair traded prices which have been established for Westinghouse portable appliances in states having applicable fair trade laws."

Chairman of the committee will be M. J. Dunn, marketing assistant to Oliver. Others on the committee are Oliver; J. E. Hugo, sales manager of portable appliances; R. Z. Sorenson, manager of electric housewares; W. C. Parker, public relations manager—all of the Electric Appliance Div.; C. P. Myers, F. W. Gaines, Jr., and J. W. G. Tenney of the corporation's law department in Pittsburgh and New York.

Oliver said that all fair trade matters will be referred to this committee and "it will be the responsibility of the committee to take appropriate action to make certain that Westinghouse fair traded price schedules are being followed."

Hotpoint Workshop Conferences To Be Held In 13 Cities

CHICAGO—A series of two-day distributor salesman workshop conferences, to be held in 13 key cities throughout the United States from Aug. 12 through 27, has been announced by John F. McDaniel, vice president, marketing, Hotpoint Co.

Purpose of the workshop conference is aimed at helping distributor personnel become better equipped to face the competitive period ahead through an exchange of selling ideas.

CONFERENCE SCHEDULE

Under the direction of D. D. Thompson, sales training manager, the workshop conferences will be held in Chicago, Aug. 12-13; Charlotte, N. C., Cleveland, and Seattle, Aug. 16-17; Philadelphia, Cincinnati, and San Francisco, Aug. 19-20; New York City, Atlanta, and Los Angeles, Aug. 23-24; and Boston, Kansas City, and Houston, Aug. 26-27.

In making the announcement of the conferences, described as one of the most outstanding contributions made by an appliance manufacturer to a distributor organization, McDaniel said that the need for such a conference was greater today than in 1952 when the first workshop conference originated.

In explaining the program, McDaniel said that basically it was a selling-idea exchange program, designed for use over a period of four months.

First there is a one month pre-conference assignment book which the distributor salesman fills out. The subjects covered during the course include time planning, toughest problems, dealer development, franchising, store promotions, product demonstrations, trade-ins, group meetings, and competitive selling.

Based on previous experience, the distributor salesman completes the pre-conference assignment, brings his answers to the workshop, discusses the techniques he has used or seen used by other salesmen, and exchanges ideas.

POST CONFERENCE CONTEST

The third phase of the program is a 12-week post-conference contest wherein the salesman puts into practice the other ideas he has received from fellow distributor salesmen.

More than 700 distributor personnel are expected to attend and participate in the conference-workshop program, which is entirely voluntary. About 97% attendance from Hotpoint's distributor organization is expected.

McDaniel stressed the importance of preparedness now for the coming competitive period in the next 18 to 24 months. "The real key to increased sales at all levels is taking time now to prepare our salesmen, plus some very hard work," he added.

The same techniques that were used in the 1952 conference-workshop will again be used: platform presentations, round table conferences, night study sessions, outline notebooks, visual media, and idea exchange.

"We found that a combination of sound counsel from experienced men and fresh new ideas from younger salesmen formed the basis for an ideal exchange of ideas among all groups which pay sales dividends," McDaniel added.

April Refrigerator Output In Canada Advances 22%

OTTAWA, Ont., Can.—A total of 39,000 electric refrigerators were produced in Canada during April, according to the Bureau of Statistics. This was an increase of 22% compared with the same month of 1953.

OF PAID CIRCULATION

C... IS FOR CIRCULATION COVERAGE

Circulation value is not merely a question of quantity, but of quality.

The surest way to reduce waste circulation in a business publication is to ask readers to pay for the magazine and eliminate those who won't. That is what audited, paid publications must do if they are to stay in business.

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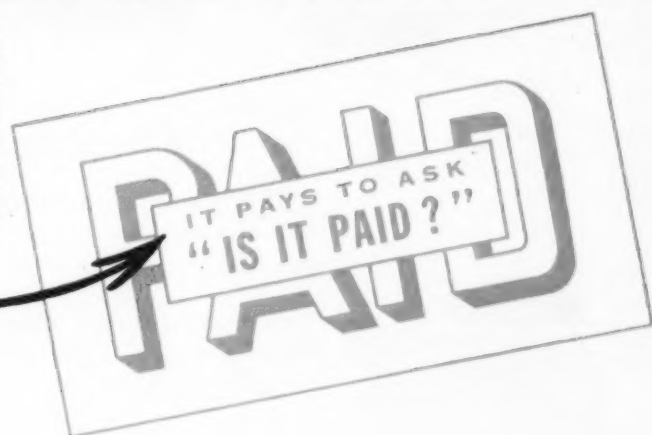
WHICH IS STILL ANOTHER REASON WHY IT PAYS TO ASK... "IS IT PAID?"

HERE'S PROOF THAT READERS PREFER PAID-CIRCULATION PUBLICATIONS!

In the Cooperative Readership Study Among Men in Industry* 42,878 customers and prospects of 18 leading industrial companies named the publication they considered "most useful." Tabulation of returns showed that in 34 of 35 fields served by an ABC publication an ABC publication was preferred!

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HEADQUARTERS FOR BUSINESS INFORMATION

Dealers Look To Senate Franchise Bill--

(Concluded from Page 1, Col. 3)

The FTC, however, will not be much help, it seems, in view of its recent opinion holding that the exclusive-dealing practices of the Harley-Davidson Motor Co. of Milwaukee "have the capacity and probability of causing a substantial adverse effect on competition" and "creating a substantial tendency toward monopoly."

Now the dealers look to a bill in Congress introduced by Senator Dirksen (R. Ill.) which would make manufacturer-dealer sales contracts an exception to the anti-trust laws. Senate hearings on this measure, before a committee headed by Senator Purtell (R. Conn.) are scheduled to get under way July 20.

In the order prohibiting the Harley-Davidson Co. from binding its 800 dealers to refrain from selling competitive products, the FTC said in part:

"Section 3 of the Clayton Act does not prohibit all exclusive dealing agreements. It only prohibits those agreements which have the capacity and likelihood of lessening competition or tending to create a monopoly in any line of commerce."

"The legislative history of this Act shows that Congress believed that exclusive dealing agreements by a small business trying to break into a market should not be prohibited. Such agreements would not provide a substantial threat to free competition even though all exclusive dealing agreements by their very nature foreclose some accounts to competitors."

"Thus, such restrictive agreements standing alone might not merit the attention of the Commission. However, here these agreements are between the largest domestic manufacturer of motorcycles and its large and effective dealer organization in the field where the bonds between the motorcyclist and the dealer are especially strong."

"In addition, competitors of respondent have lost business and in varying degrees have been foreclosed from the market represented by respondent's dealers."

"These facts establish that these exclusive dealing agreements have the capacity and probability of causing a substantial adverse effect on competition in this field and of creating a substantial tendency toward monopoly."

The Commission further said that "The paramount need in this case is to prohibit respondent from restricting its independently owned dealers from exercising their right to make their own decisions as to what they want to sell. Harley-Davidson can select its own dealers, but it cannot legally, by threats of cancellation, force its dealer to agree to sell any class of its products exclusively."

"However, as to functional parts and oil, we believe that an agreement prohibiting the use of oil or parts which would adversely affect the mechanical operations of Harley-Davidson motorcycles would be proper in all respects."

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La. Firm Gets Charter

LAKE CHARLES, La.—Lake Charles Air Conditioning, Inc., 1912 Moss St., has been granted charter of incorporation. Mrs. Josephine Lanza is vice president of the company; Mike Lanza, president; and Joseph Lanza, secretary-treasurer.

Parts Wholesaler Takes A Comparison With '53 —Finds '54 Way Ahead

SIDNEY, Ohio—Officials of Copeland Refrigeration Corp. think one of the most optimistic notes they've seen on business this year comes from Hoffman Supply Co., Springfield, Mo. refrigeration supplies and equipment wholesaler.

Harry G. Hoffman, manager, reported March refrigeration business increased 98% over the same month of 1953. March over February volume was up 80%. And Hoffman's total refrigeration sales for the 12 months March 1953 to March 1954 showed an increase of 23%.

"We attribute practically all of this increase in sales to Copeland refrigeration equipment," Hoffman said. "From these figures, we certainly cannot believe there is a 'depression' or 'recession' going on in this country."

Ranney Appoints Eggar-Bennett

MINNEAPOLIS — Eggar-Bennett here has been appointed representative of the Ranney Refrigerator Co., Greenville, Mich., manufacturer of electric refrigerators and upright home freezers.

Eggar-Bennett will market Ranney products in the states of North and South Dakota, Minnesota, and western Wisconsin to distributors and key accounts.

New Air Conditioning Firm To Operate In Mountain States Area

SALT LAKE CITY—The newly formed firm of Climate Engineering Co. has been named distributor for Carrier Corp. in the states of Utah, Idaho, northeastern Nevada, western Montana, and western Wyoming, it was announced here recently.

The Climate Engineering Co. office is located at 751 W. Eighth S. here. Warehousing of parts and supplies is planned, along with complete engineering service.

Principal officers of the new Carrier outlet are Ralph E. Woolley, president; Jay A. Quealy, Jr., vice president, secretary, and treasurer; and Wilson K. Abbott, vice president and general manager.

Woolley, a general contractor and builder, and Quealy are residents of Honolulu, T. H. and officers of Air Conditioning Co. of Hawaii, distributor for Carrier air conditioning and refrigeration equipment in the Pacific area.

Abbott, who is moving to Salt Lake City from Los Angeles, first became associated with Carrier in 1949, serving as western states merchandising manager.

William R. Olsen, professor of mechanical engineering at the University of Utah, will leave his teaching position to direct the engineering staff.

CORRECTION



W. W. Bolton
President of
Dryomatic Corp.



R. E. Engel
Wolverine Sales
Representative

In articles on page 11 of the June 28 issue of AIR CONDITIONING & REFRIGERATION NEWS the pictures of Walter W. Bolton, new president of Dryomatic Corp., and R. E. Engel, newly appointed sales representative in the Oklahoma-Kansas area for Wolverine Tube Div. of Calumet & Hecla, Inc., were inadvertently transposed. With the pictures and captions above the NEWS sets the record straight.

Bagpipes Bag 'Em

TORONTO, Ont., Can.—A girls' bagpipe band was a traffic puller during the formal opening of Bestway's third appliance store here at 2419 Yonge St.

Other traffic getters were free cones and ice cream for all visitors. The firm has two other locations in Toronto.

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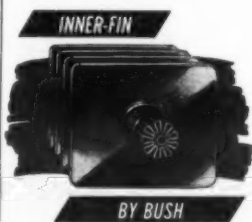
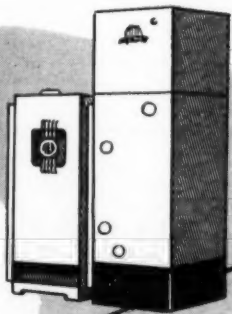
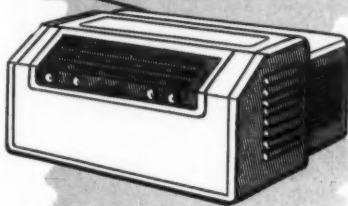
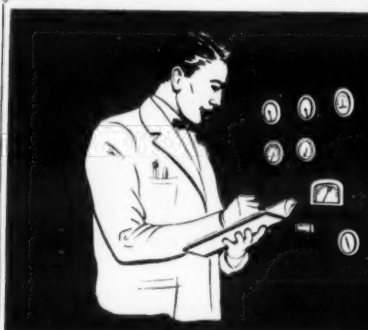
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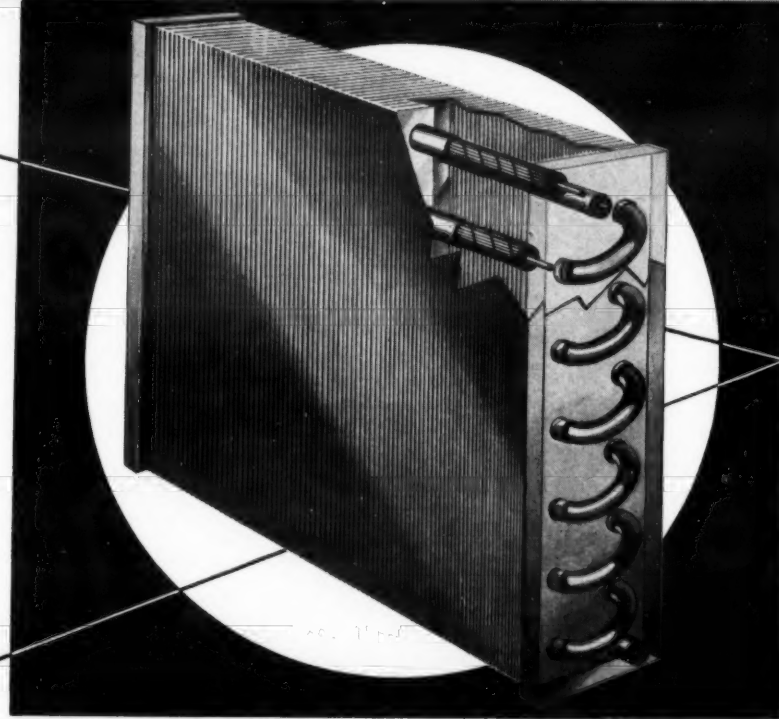


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